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The historical use of salvaged building materials in Britain

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'Spolia Britannica: The historical use of salvaged building materials in Britain'

(Revised)

Michael John Heaton

A thesis submitted for the degree of Master of Philosophy

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February 2016

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'*Spolia Britannica*: The historical use of salvaged building materials in Britain'

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ABSTRACT

Using case studies from the author's professional work as an archaeological surveyor of historic buildings in southwest England, the thesis examines evidence for the historical use of salvaged materials in British buildings; compares it with accounts of the same in architectural, economic and cultural histories; and argues that the material is more common and of greater archaeological potential and historical significance than the limited anglo-centric literature would suggest.

The thesis demonstrates that salvage was culturally endemic throughout England and probably the whole of Britain throughout the later Middle Ages and the early Modern periods and was facilitated by sophisticated markets, distribution networks and possibly customary 'linear' exchange; that, in addition to its iconographic and economic value, salvage was an important vector of technological and stylistic diffusion and development; and that salvaged architectural details – or *spolia* – were employed creatively by Catholic and other minority owners as expressions of cultural affinity and political legitimacy. That creative use reaches its ultimate expression in the 'ruins' of Bradenstoke Priory in Wiltshire, which were re-sculpted using salvaged materials by a succession of Catholic and latterly antiquarian owners during the late 17th, 18th and 19th centuries, before partial demolition – for salvage – by William Randolph Hearst in 1929.

SPOLIA BRITANNICA: THE HISTORICAL USE OF SALVAGED BUILDING MATERIALS IN BRITAIN

Michael Heaton.

INTRODUCTION

The study of salvage in Britain

Architectural salvage is an established subject of academic study, but one in which Britain hardly features. The re-use of materials and details – in specific circumstances referred to as *spolia*¹ - recovered from older buildings was widespread in late imperial Rome² and its early medieval successors³, was instrumental in the development of Renaissance architecture in Italy⁴ and was of considerable economic value throughout medieval and Ancient Regime France and Italy⁵, but the extent and manner in which those uses operated in Britain has not been addressed.

Whilst several authors⁶ have referred in passing to the re-use of building materials in Britain, mainly with regard to the Dissolution of the monasteries in the 16th century, few⁷ identify anything other than economic utilitarianism in the practice and fewer still are specific about examples. A rare exception, as a published British example of architectural *spolia* in the Classical sense of the word – i.e. a decorative detail chosen and re-used specifically for its associational value - is the late 17th century Barbican gate at Plymouth⁸.

Admittedly, Britain is at the outer edge of the Classical and Renaissance worlds and a late recipient of their influences, but the purposeful use of salvaged materials and

¹ The term is used variably by different authors: Brenck (1987) and Alchermes (1994), for instance, use it specifically to refer to architectural and epigraphic details of clearly understood associational value; Waters (2015) uses it to refer to all salvaged materials whether visible or not in the host building; whilst Bernard *et al* (2008) and Greenhalgh (2009) avoid the term altogether. The present author adopts Brenck and Alchermes' usage, except in the conceit of the thesis title.

² Alchermes, 1994

³ Brenck, 1987; Greenhalgh, 2009

⁴ Payne, 1998

⁵ Bernard, *et al*, 2008

⁶ Cf. Airs, 1995; Briggs, 1952; Colvin *et al*, 1982; Salzmann, 1952

⁷ Specifically Howard, 1987, p26; Stevenson, 2006.

⁸ *Ibid*

spolia, per se, has been demonstrated in 17th century Ireland⁹, physically more distant than Britain from the Classical world and having lacked direct contact with it, and throughout Medieval and *Ancien Regime* France¹⁰. There is no obvious geographical reason, therefore, for its absence from Britain¹¹.

Culturally, however, Britain became increasingly distinct from its two nearest neighbours and the rest of the Catholic world after the Reformation, and by the middle of the 18th century was the only industrialised economy in the world and well on the way to becoming the first urbanised one, with all the attendant social evils that brought. But not every Briton embraced iconoclastic Protestantism or the rationalism of the economic revolutions that followed it¹². Many covertly clung to – or adopted – the ‘old way’ and its cultural links with sunnier climes; others, later, ignored or were by-passed by the march of Reason. Their eccentricity, unrecorded historically, remains manifest in their material artefacts – of which the largest and most multi-faceted are their buildings: specifically their use of salvaged materials, structural assemblies and architectural details.

Drawing on a wide range of published sources from the disciplines of archaeology, cultural history, economic history, ethnography and architectural history, together with case studies from the author’s professional portfolio, this thesis demonstrates that the purposeful re-use of salvaged building materials and architectural details was as common in Britain as the rest of Europe. Furthermore, the thesis argues that in addition to the iconographic use and economic utility manifest in Ireland and continental Europe, the exchange of such material in Britain also had important social agency. That use influenced the development and dissemination of architectural forms and construction technology, whilst its aesthetic use in buildings such as Bradenstoke Priory demonstrate that the influence of Renaissance architecture and architectural writing was perhaps more widespread in Post-Medieval Britain than previously thought.

⁹ Moss, 2008.

¹⁰ Cf. Bernard, *et al*, 2008

¹¹ For the purposes of this study, 17th century Ireland is deemed to have been an occupied country, not an integral part of Britain.

¹² Duffy, 1992, 2001; Haig, 1981

Evidence base

The evidence base for this study is a number of case study buildings drawn from the author's professional caseload in the south west of England: No. 56 Market Place, Warminster (Wilts); No. 28 Shalbourne (Wilts), Netherhams Farm, High Ham (Som); Cockington Court, Torquay (Devon); Whitestaunton Manor, Chard (Som); Christchurch Priory (Dorset), and Bradenstoke Priory (Wilts).

The Warminster and Shalbourne examples are small houses of essentially vernacular character of 18th century date that display abnormal features caused by their use of salvaged structural elements and materials; Netherhams Farm is a large farm group of late 17th or early 18th century origin built by the aristocratic Stawell family using architectural details salvaged from a predecessor's mansion for decorative and, possibly, polemical effect; Cockington Court is a substantial manor house of early medieval origin that incorporates an entirely re-used upper floor structure in its late 17th century iteration; Whitestaunton Manor is a substantial manor house of later medieval origin that incorporates a wide range of salvaged decorative details and structural elements utilised for visual and, possibly, polemical effect in the 16th – 18th centuries; Christchurch Priory is a major church of monastic origin with an entirely second hand nave roof and pulpitum; and Bradenstoke Priory is the celebrated relic of a former building, reconfigured throughout the late 17th to the 19th centuries with salvaged materials and details.

Though situated in the southwest of England – and so perhaps only '*Spolia Anglica*' - they have been selected because they demonstrate the extra-economic use of salvaged materials and because they are typologically and chronologically representative of pre-Modern British buildings. They were not selected for the cultural affinities of the owners and tenants: that thread of the thesis became apparent only during later research. The case study buildings demonstrate that salvaged materials were employed in a variety of circumstances, for different reasons and to different ends. In small vernacular buildings, such as at Warminster and Shalbourne, it undoubtedly answered an economic imperative, but also occasioned the creation of new structural forms and building layouts that demonstrate the inertia of tradition was not necessarily as irresistible as vernacularists would have us believe. Others, such as Cockington Court and Christchurch Priory, possibly reveal complex patterns of patronage and social precedence. In others, such as Bradenstoke Priory, the use of

salvaged materials and details spawned aesthetic creations that have eluded identification, despite the importance of that building to conservation orthodoxy.

The author suggests that the patterns of re-use evident in the case study buildings are a British manifestation of the use of salvaged building materials and architectural details – a *Spolia Britannica*.

Method

Not all of the case studies are accompanied by the volume and quality of archive sources on which architectural history is normally reliant. In the case of the humbler buildings, this is because those records almost certainly never existed; others are known to have been lost; others are being withheld by former owners. For that reason, many of the deductions made here are archaeological; i.e. they derive from analysis of the layout, structure and fabric of the buildings, often during partial dismantling, rather than solely from drawn, written or photographic historical sources.

Buildings Archaeology, as it is known in Britain, is a lumpen relative of Architectural History predicated on the assumption that the appearance of a building is not always a reliable guide to its age or primary function. Its methodology is beyond the scope of this study, but it is exemplified by Mark Wilson-Jones' analyses of the Pantheon and is explained in greater detail in the author's paper 'Building Palaeopathology: Practical Applications of Archaeological Building Analysis' ¹³.

Arguably, there is no meaningful distinction between Architectural History and Buildings Archaeology, merely variations of emphasis, just as there is within each discipline: Classical archaeologists of the Graeco-Roman world have little in common with 'New' archaeologists of the American southwest, the one heavily influenced by textual sources and stylistic analyses; the other by social anthropology and statistics. Similarly, contributors to *Architectural History* and *Vernacular Architecture* appear to have little in common, the one concerned with the evolution and transmission of aesthetics, the other with the *Volkische* attributes of rural carpentry. Wilson-Jones' work might be said to be an effective amalgam of the two. Nonetheless, David Stocker, in his introduction to *Buildings Archaeology*:

¹³ Heaton, 2009

*Applications in Practice*¹⁴ makes clear that as recently as 1993 buildings archaeology was viewed primarily as a tool of building conservation management – a survey method on which to base decisions of selection at a time when the State was still the principal sponsor of archaeology and building conservation in Britain. That is still the main application of buildings archaeology and in its purer forms it tends to get bogged down in typological classification and distribution analyses – necessary tools in the early stages of all academic study, but not particularly interesting ones – exemplified by the recurrent reports of newly discovered cruck buildings or Wealden houses published by the *Vernacular Architecture Group*, or Ronald Brunskill's undated analyses of vernacular buildings. Both are invaluable tools to the buildings archaeologist, but neither is an archaeological study in its own right.

However, a number of practitioners and academics, such as Grenville¹⁵ and Johnson¹⁶, have promoted a more outward-looking path, demonstrating that buildings archaeology has an intellectual purpose of its own and the potential to inform historical study with information not available from other sources. That purpose includes analysis of the social use of buildings, particularly at the vernacular level, and the development and transfer of construction technology. This study, hopefully, sits within that camp. In the British context, buildings archaeology requires understanding of three threads of construction history allied with archaeological methods: (1) the evolution of building forms, structures and techniques; (2) the development of building materials, their means of production and methods of use; and (3) the social and economic history of the people who paid for, built and occupied the buildings. The English language does not have a concise term for this subject, but German speakers refer to it as *Bauforschung* – 'building research'¹⁷.

The word 'salvage' is used here in preference to '*spolia*', in order to widen the study beyond the iconographic meaning of the latter to the economic and functional re-use of building materials. Bernard *et al* use the word 'Reimpiego' for the same reason in their analysis of salvage in France and Italy¹⁸. The word 'salvage' is both a verb and, in maritime communities, a noun, and this author extends that maritime usage to the

¹⁴ Stocker, 1994, pp1-12

¹⁵ C.f. Grenville, 2001

¹⁶ Johnson, 1986; 1989; 1992; 2010.

¹⁷ Klein, 2014. The subject is promoted in Germany by the *Koldewey-Gesellschaft*, whose eponymous website hosts a variety of introductory texts from the 1920s onwards; and by the recently established *Gesellschaft für Bautechnik Geschichte*.

¹⁸ Bernard, *et al*, 2008

built environment. Where the word *spolia* is used here, it refers specifically to the iconographic and visual re-use of architectural or epigraphic details for their associational value.

Two subjects that have a tangential bearing on the British use of salvaged materials are referred to, but not considered in detail: the remodelling of buildings *in situ* and the Gothic(k) Movement. For the purposes of this study and contra Bernard *et al*, 'salvage' excludes the incorporation of *in situ* earlier structural fabric within later buildings, such as Roman walls within medieval buildings, or the re-modelling of medieval buildings in the 16th, 17th and 18th centuries, as studied in depth by Doggett¹⁹ and Howard²⁰. Though not widely recognised in Britain outside monastic studies, it is a commonplace of European construction history and there is a growing body of archaeological evidence for it in Britain²¹. Howard, in particular, has demonstrated the role the redundant monastery buildings played in the architectural development of larger secular building forms in the 16th and 17th centuries, as remodelled structures and as the templates for new designs. It is a large subject and has been studied in depth by others, principally Howard. Nonetheless, whilst an analysis of the architectural, historical and structural implications of *in situ* re-use is therefore unnecessary here, it is argued that the portable structural assemblies and components of those monastic buildings - floors, roofs, windows etc. - had a comparable influence on the layout and appearance of smaller and vernacular buildings.

Also excluded from the remit of the thesis is the Gothic(k) movement of the 18th century. Whilst the creations of Horace Walpole and various members of the Wyatt family, for instance, were clearly informed by historicism and cultural insecurity²² and occasionally re-used salvaged materials²³ and structural assemblies²⁴ for deliberate visual effect, the Gothic - Gothik or Gothick - movement was concerned primarily with the fanciful re-imagining of medieval buildings and ruins, not necessarily the re-use of their components. It is an immense pan-European subject that has been examined

¹⁹ Doggett, 1997

²⁰ Howard, 2003; 2007

²¹ Woodward *et al* 1993, have identified medieval buildings incorporating Roman walls and floors, and this author - amongst many - has identified late medieval buildings behind the Georgian facades of Bath (Heaton, 2003). Much of *Reimpiego* (Bernard *et al* 2008) is devoted to this topic.

²² Bann, S., 2009, p 122; Watkin, 1998, p14.

²³ Fancelli, 2008.

²⁴ Guillery and Snodin, 1995, p 124 suggests that Walpole re-used part of a neighbouring house for his Servants' Hall at Strawberry Hill.

in depth by others and is beyond the scope of a study such as this. Nonetheless, the thesis touches briefly on the subject with respect to the remains of Bradenstoke Priory that, the author contends, were augmented with specifically salvaged materials and details during the late 17th and 18th centuries, suggesting a possible 17th century origin for the Gothic(k) movement in Britain.

Thesis format

In the following pages, the received understanding of salvage in Britain is compared with a critical review of a wide range of published sources relevant to the history of architectural salvage arranged by academic discipline, followed by a summary review of the principle themes drawn from them. The case study buildings are then introduced and specific instances of salvage in them described, together with analyses of the manner in which those instances complement themes drawn from the published sources. The thesis concludes with a comparison of the received and developing understanding of historical architectural salvage in Britain, an analysis of the manner in which the case studies inform that developing understanding, and a characterisation of that historical use and its significance. Footnote numbering is chapter-specific. All illustrations are the author's.

CURRENT UNDERSTANDING: INSIGHTS AND LIMITATIONS

Overview

Buildings and their constituent materials and assemblies are artefacts, in the archaeological sense of the word. The historical study of their procurement and use therefore straddles the disciplines of architectural history, economic history, anthropology and ethnography, social history, cultural history, building conservation and archaeology. The subject matter of these disciplines is published in forms and levels of detail varying from primary site-specific studies to secondary and tertiary syntheses, in article and monograph formats. Each is constrained by the limitations of its sources and methods, making presentation and critical comparison of them problematic. For instance, the incidence of salvaged materials identified in a visual survey of the exterior wall surfaces of one building cannot be compared quantitatively with that identified during archaeological examination of another during its demolition.

Furthermore, there are qualitative differences between, for instance, peer-reviewed academic articles, 'popular' accounts such as those published by the *SPAB*, and the 'grey literature' professional reports produced by professional archaeological and architectural history practices. The primary data presented in each is arguably of equal value, but we might expect the degree of comparative analysis to vary between them. Accordingly, those disciplines are treated separately below.

Architectural history

The literature on architectural salvage and particularly *spolia* in the Classical world is substantial and supported by a large number of extant Roman, medieval and Renaissance buildings. Greenhalgh and Waters have recently catalogued and examined the widespread re-use of specific stone types – marble and granite respectively - throughout the Classical, medieval and Renaissance Mediterranean, identifying the inception of *spolia* proper during the religious re-alignment under Constantine, the role of salvaged Roman materials generally in the development of Islamic architecture and the preferential and specific use of those two stone types in civic buildings of Quattrocento Rome, with Greenhalgh asking the obvious question:

does imitation and re-use carry a message ? ¹. Earlier authors such as Alchermes and Brenck have analysed the military origin of *spolia* in late imperial Rome and its adoption by the successor kingdoms of southern Europe that modelled themselves on their former foe ². Ousterhout and Flood have documented the continued and apotropaic role of *spolia* in the former Roman heartlands of Western Asia into the early Middle Ages³; and Payne reminds us the importance of *spolia* and salvaged architectural details in the development of Renaissance architecture in southern Europe⁴. It is a broad and well-established subject that does not need repetition here, although some of Ousterhout's observations on apotropaic use will be re-visited later. Nonetheless, in most cases except perhaps Islamic use, salvaged materials and *spolia* in particular were employed to confer cultural and political legitimacy on the host buildings and their sponsors during periods of cultural or political uncertainty. It is argued below that comparable circumstances were experienced by the named owners/tenants of at least three of the case study buildings and that their use of salvage and *spolia* is directly comparable with Classical practice. Furthermore, as the circumstances of the owners/tenants are known in reasonable detail and, being more recent, the salvage incorporated in the case study buildings includes timber and secondary materials such as decorative plaster, the thesis augments the Classical canon.

Britain hardly features in that literature, despite the introductory texts to the architectural history of any one area of the country often making passing reference to the use of salvaged and re-located details in many buildings. For instance, many a volume of Pevsner's guides will list at least one 18th or 19th century building with a front porch designed for a different building, such as Warminster School with its front portico lifted by the Gothic(k) architect James Wyatt from nearby Longleat House⁵; or the many 18th century Gothic(k) follies of Wiltshire that incorporate whole elements of, for instance, Salisbury Cathedral⁶. Similarly, Colvin's study of the former 17th century mansion at Netherham's Farm⁷ in Somerset, starts with an account of the later relocation of its stables archway to nearby Hazlegrove House, but ignores the re-used architectural details evident in the agricultural buildings that have survived it.

¹ Greenhalgh, 2009; Waters, 2015

² Alchermes, 1994; Brenck, 1987

³ Ousterhout, 1995, 2003; Flood, 2006

⁴ Payne, 1998

⁵ English Heritage, 1978, citing Pevsner.

⁶ Headley and Meulenkamp, 1999, p532

⁷ Colvin, 2001

Pevsner and others have made similar observations at Shute Barton in Devon, where the catholic Pole family incorporated salvaged materials in their rebuilding of Shute House in c. AD1561⁸. Such examples are treated by those authors as isolated instances of opportunistic acquisitiveness or economic expediency, lacking other significance.

This is possibly because, as no Roman buildings survive here now above foundation level⁹ and there are relatively few Renaissance buildings, there is no history of *spolia* scholarship in Britain. Unlike Vitruvius, Serlio, Fontana *et al* who refer to ‘redevivus’ and the re-employment of Roman details, or 17th century French architectural treatises such as Rondelet’s, the earliest architectural writing in Britain– Shute, Wotton *et al*, - was concerned primarily with generalities of form rather than the practicalities and details of construction. Against this background there are, however, some contemporary scholars who do have a regard for salvage and *spolia*. Though focussing on the impermanent ceremonial architecture of Stuart processions as a form of theatrical staging, Stevenson has contributed an important survey of artistic and popular attitudes to salvaged building materials in the years between the Dissolution and the upheavals of the mid 17th century¹⁰. Though not referring to *spolia*, initially, by that name, she states that “*The reuse of materials from demolished structures was an economic practice familiar to them* (i.e. Londoners)” and, more importantly, that they were familiar with “*the symbolic charge that it could carry*” citing John Stow’s reference of 1603 to the practice¹¹ of using “*stones taken from the Jew’s house in 1215*” - i.e. 400 years prior to the material’s incorporation in 17th C London tenements, during which period they had been carted around London from building site to building site. She does use the term specifically when referring to the aesthetic of De Gomme’s arch at the Citadel in Plymouth for Charles II and its incorporation of salvaged decorative detail - *spolia* - in obvious imitation of Roman and Italian practice. It is perhaps significant that De Gomme was a Walloon¹² schooled in the military engineering of Renaissance southern Europe and that his patron was a closet Catholic classicist recently returned from long exile in France.

⁸ Cherry and Pevsner, 1989, pp729-730; Hussey, 1951.

⁹ This is a generalisation. Nonetheless, surviving Roman masonry in Britain is of *opus caementicium* – i.e. rubble construction, which does not lend itself to the identification of re-used material.

¹⁰ Stevenson, 2006

¹¹ i.e. implying it was common practice, not an isolated instance

¹² i.e. French-speaking subject of the Spanish Netherlands, now Belgium

Similarly, Moss demonstrates that the structural and decorative use of salvaged Romanesque masonry, the latter as *spolia* in the Classical sense, was also relatively widespread amongst the Protestant Ascendancy of 17th century Ireland¹³, so it might be reasonable to assume that similar practices pertained amongst their relatives elsewhere in Britain at that time. Though identifying a relatively small number of buildings compared to, for instance, Renaissance Italy, she demonstrates that the practice affected private and civic structures and was deliberately employed to associate the Protestant Ascendancy with the Romanesque architectural manifestations of the early Catholic church in Ireland. Few English landowners would ever have felt the same need, but the theocratic vacillations of the second half of the 16th century and the political turmoil of the mid 17th century created similar conditions for a large number of them, famously manifest in structures such as Sir Thomas Tresham's triangular lodge at Rushton and the Priests' Holes beloved of visitors to Tudor and Jacobean country houses. Moss' paper is a singular and important study that demands a similar analysis of British material.

Nonetheless, the use of salvaged materials - if not *spolia* in the strict Classical sense of that word - is alluded to in a large number of historical sources summarised by, for instance, Colvin, Salzmann or Ails. All are concerned with major buildings, principally those of royal and aristocratic patrons or the dissolution of the monasteries, because of the necessarily better quality archive sources available for their study, and all deal with salvage as a purely economic issue.

Colvin reminds us that large amounts of material was salvaged from the monasteries in the second half of the 16th century, some of it not used until the 1590s, such as that taken from Canterbury, but he treats it - briefly - as a purely economic resource. Volume II – The Middle Ages – presents four references to salvage, such as a Royal house at Sheen ¹⁴ where "*careful inventories were made of the stone, timber, lead, tiles, and nails from these two houses, and considerable sums spent on their carriage*" demonstrating how well-organised the undertaking was. More interestingly, he tells us that a Royal house at Sutton incorporated timber salvaged from a temporary house erected a hundred years earlier in c. 1397 at Westminster for parliament. In other words, the materials were being re-cycled more than once, almost as if medieval builders thought of them as modular components. More recent

¹³ Moss, 2008

¹⁴ Colvin et al, 1963, p1004

studies (below) and the case studies suggest this practice continued into the 19th century.

Salzmann makes only passing references to the re-use of materials, such as the re-casting of lead, which is still current practice, but does not address the subject of 'salvage' *per se*¹⁵. This is largely because his period of study ends at AD1540 – the date at which the practice appears to come to the notice of British historians - but it is also possibly because he was writing in the immediate post-WWII years when rationing of building materials was still in force: the re-use of such materials was hardly noteworthy then. The present, as ever, affects what we see in the past.

Later writers, such as Airs, specifically address the subject of material re-use, demonstrating the widespread use of salvaged materials in larger Tudor and Jacobean houses, but nonetheless along economic lines¹⁶. Harris, however, also makes clear the immense scale of the trade in architectural salvage from the 16th century onwards across the whole of Britain, in a study devoted solely to the issue of salvage. His is also the only study in the English language that attempts to ascribe cultural significance to the activity and its end results, observing that some of William Randolph Hearst's fairy castle creations – such as at St Donat's in Wales – achieved an architectural quality favourably comparable to that of their source buildings – in that case, ironically, Bradenstoke Priory¹⁷.

Those are primarily economic analyses. Howard takes a broader look at the economic, aesthetic and social context of building refurbishment and reuse and the legal framework evolving with it, in his *The Early Tudor Country House*¹⁸ and *The Building of Elizabethan and Jacobean England*¹⁹. In addition to demonstrating the extent to which monastic buildings were re-modelled *in situ* in the late 16th and early 17th centuries and their influence on subsequent building forms, he demonstrates that the dismemberment of the monastic estates and their buildings was actually a complex and multi-faceted phenomenon undertaken for a variety of motives over varying timescales, but benefiting – economically at least – a small and distinct population: the aristocracy and the gentry. He also alludes to the development of

¹⁵ Eg. Salzmann, 1952, p264

¹⁶ Airs, 1995, pp 26,29,124,128 and 133

¹⁷ Harris, 2007

¹⁸ Howard, 1987, p136

¹⁹ Howard, 2007

statutory control of building practice in the early 17th C that might have influenced the use of salvaged materials. Evolving contract forms (away from day work to lump sum valuations) might have encouraged the use of salvaged materials, and he cites a late 15th century contract that specified the use of salvaged timber²⁰. The present author has encountered similar specifications in early 19th century contracts, and Bernard *et al* (below) illustrate the prevalence of such specifications in medieval and Ancien Regime continental Europe²¹. Howard also avers, significantly, that “*..recycling building materials was a familiar exercise in early Tudor England and in this sense the destruction of the monasteries simply formed part of a much wider interchange and re-use.*”²² Was the dismantling of buildings and the re-distribution of their materials customary ?

Conservation case studies

Non-academic building conservation case studies, though offering little analysis, record and publicise the occurrence of phenomena such as salvage because they tend to give the ‘unexpected’ equal billing with the ‘received’ and are not subject to the degree of editorial control applied to academic articles in, for instance, *Architectural History*. The authors can tell us what they found without having to make sense of it. Good examples include the on-going restoration of the ostensibly late 18th – early 19th century Tindall's Cottage by the Weald & Downland Museum²³. Their conservation-led archaeological analysis of the building's 249 frame timbers concludes that at least 80% of them had been used in ‘donor’ buildings prior to incorporation in Tindall's Cottage, some of which were of late medieval form, and they go as far as to identify possible ‘donor’ buildings – all of higher social status - and the manner in which the salvage was undertaken. This is redolent of the ‘modular’ aspect implied by Colvin's report of medieval re-use at Sheen (above).

Similarly, the editor of the March 2013 edition of *Context*, thought the discovery of salvaged timbers at Kelmarsh Hall sufficiently interesting to warrant mention on its own account²⁴. There, dendrochronology of the early 19th century roof structure has revealed that most of it had been recovered from the building's early 18th century

²⁰ *ibid*, pp25-27; 106-9

²¹ Bernard, *et al*, 2008.

²² *Op cit*, p26

²³ Thompson, 2013.

²⁴ Cowan, 2013

predecessor, whilst a smaller amount had been first used in the building's first 'iteration' as an early 17th century manor house. The author has identified similar patterns of re-use at, for instance, Dyrham Park House near Bath. Though only singular examples, Tindalls, Dyrham and Kelmarsh suggest, perhaps, that the use of salvaged materials was widespread and that the trade was not necessarily economically or socially uni-directional – i.e. it passed up, down and across the economic and social hierarchy - a point returned to later in the case study of Cockington Court.

Peter Inskip's account of his work at Stowe benefits from the comprehensive and well-managed archives of that estate, which document, *inter alia*, the demolition and sale of buildings for their materials. Inskip, with undisguised surprise, describes the extent of recycling discovered during the restoration of the garden buildings, both of materials and architectural details. The architectural details appear to have been dismantled and re-assembled rather like theatrical scenery, which, indeed, they were; but what surprised Inskip most was the degree to which salvaged building materials were also redeployed in the garden buildings and the main house. He also reports the discovery of an inscribed stone dated 1812 within walls supposedly built in 1737, but shies from the obvious conclusion that the date of such buildings can never be taken at face value. His concluding remark, however, is very pertinent: “ *our own work has to be based.....on archival and archaeological evidence as well as pictorial references.*”²⁵

That salvaged materials could be used for specifically architectural purposes, at least in the late 19th – early 20th centuries, is indicated by an instance at Parham House in Sussex where Kirk has recently identified what appears to have been a deliberate attempt at “archaeologically misleading” restoration work of the 1920s by the architect Albert Victor Heal, designed to suggest a more complex structural evolution than is actually the case²⁶. The author has identified similar practice in several buildings, including the case studies of Whitestaunton Manor in Somerset and Christchurch Priory in Dorset.

²⁵ Inskip, 1992

²⁶ The author is indebted to Dr Jayne Kirk for bringing the recent discoveries at Parham House to his attention before publication of her book.

Whilst mainstream architectural history appears uninterested in the subject of salvage or *spolia* in Britain, some authors have noted the occurrence of the practice when they have encountered it, in passing, and several – specifically Stevenson, Harris and Howard – have given it the emphasis this author believes it deserves.

Cultural and social history

The broader disciplines of cultural and social history hint at the context in which salvage - Howard's 'interchange'²⁷ - might have been employed. Contemporary commentaries, such as such those of John Evelyn or Francis Bacon, though evidently not concerned with the fabric of buildings, evince the dawn of modern environmental conservation and therefore, perhaps, the circumstances in which re-use of materials might have become desirable for its own sake²⁸. Evelyn's *Sylva* was commissioned by the Admiralty in response to timber shortages at the end of the Civil War, specifically to promote the better husbandry of a finite resource of national importance and was still being re-printed and widely emulated in the mid 18th century. Though not concerned with building *per se*, Evelyn was an influential figure in late 17th century Britain and his views would have exerted pressure on the suppliers and users of timber, especially in maritime localities. Though there is – as yet – no historical evidence of that influence, the existence of large quantities of salvaged timber in otherwise well-funded buildings in such localities might be the archaeological evidence of it, a theme returned to later in the case study of Cockington Court.

Evelyn's writings are quoted at length by Harris' *Oak: A British History....* Chapter 6 of which also deals with the 'Myths and Legends' associated with oak. While primarily concerned with superstitions about the living trees, it refers to the Boscobel Oak in Cumbria in which Charles II is reputed to have hidden, fragments of which were retained after felling by superstitious Royalists for apotropaic use as souvenirs in their houses in the belief that this would protect them from storm damage²⁹. Though not strictly 're-use', the Boscobel oak demonstrates that early-Modern Britons

²⁷Howard, 2007, p26

²⁸ Evelyn's many environmental polemics, such as *Fumifugium* are examined by a number of authors, including Saunders (1970), de la Bedoyere (1995) and Jenner (1995). Colclough's analysis of Bacon's *The Materialls for the Building....*(2010) is, ironically, not concerned with building materials, but it does demonstrate over half a century of environmental polemic before Evelyn and a ready market for his writings by the 1660s

²⁹ Harris, Harris and James, 2003, p141

attributed extra-utilitarian qualities to the materials that could have been used in buildings.

Similarly. Duffy relates the hoarding of religious relics – structural and liturgical – by unreformed parishioners in the later 16th century³⁰; whilst Airs deduces an early reticence to build on formerly religious sites, for exactly the same reason – the material fabric of the buildings was clearly deemed to be imbued with metaphysical powers³¹. In the Near East it might have been the detail of the re-used epigraphy or sculpture: in Britain, as Stevenson notes above³², it appears to have been the material itself.

There is also something to be deduced from international comparators. A singular example is Gil's study of the maintenance of houses of the Jewish *Qodesh* charity at Fustat in medieval Egypt, which identifies an early embargo on the re-use of buildings and their materials after structural failure, in contrast to contemporaneous Islamic practice³³, giving way in the beginning of the 13th century to allow the secondary use of material such as bricks and timber, including timber from churches³⁴. This appears to contrast, markedly, with European and Islamic practice at roughly the same time³⁵, suggesting that such attitudes were culturally determined. A stricter embargo has been maintained by in the Far East, particularly that of Shinto Japan³⁶. In highly ritualised Japanese tradition, Shinto or otherwise, many of the different parts of a timber building, for instance, require specific cuts and species of timber that cannot be used elsewhere or again. From the early 17th century at least, that tradition was also transmitted by prescriptive construction manuals that specified carpentry assemblies through detailed drawings in a manner that had been “*previously reserved to a very private use*”³⁷ – i.e. royal and aristocratic households, with the specific intent of encouraging the “*practical training and skills development of master carpenters.*”³⁸ The inherently conservative approach and intent of those construction manuals contrasts with the more aesthetic

³⁰ Duffy, 1992, p562; 2001, pp143,162,177

³¹ Airs, 1995, p27. Admittedly, some new owners were wary of repossession during the fluid politics of late 16th century England.

³² Stevenson, *op cit.*

³³ Cf. Greenhalgh, 2009

³⁴ Gil, 1971

³⁵ Cf Bernard *et al* discussed later under ‘Archaeological’ sources.

³⁶ Keene, 1969; Treib, 1976; Frampton, Kudo and Vincent, 1997; Adams, 1998; Wedelken, 1998

³⁷ Cluzel, 2012, p657. (The author is French and writing in English about a Japanese subject)

³⁸ Cluzel, *ibid*, presents a brief bibliography and analysis of these construction manuals.

imperative of European treatises of that time, which left execution to the ingenuity of vernacular tradesman. The manuals appear to have been effective as a mechanism of technology transfer: building construction and design in Japan changed little between the 17th century and the mid 19th century, when Western architecture was adopted. Attitudes to the use of salvaged materials are therefore cultural and have possibly affected the development of construction technology.

Sociological and anthropological studies, which ought to address a society's attitude to its buildings and the materials from which they are made, focus entirely on portable objects and the majority are pre-occupied with the emergence of consumer capitalism. Belk plots changing attitudes to concepts of 'self' from the Middle Ages into the modern period and the effect this had on conspicuous consumption. Material possessions in this regard are restricted to clothes, jewellery and other high value objects: neither buildings nor building materials are mentioned, which is odd bearing in mind that buildings remain the most expensive 'object' any one in the West is likely to own. Nonetheless, he points out that "*conspicuous waste*" as well as consumption could have been used to "*assert and solidify status*"³⁹ – i.e. the use of salvaged materials might have been a social activity that alluded as much to the donor as it did the recipient. This is analogous to the North American practice of '*potlacht*', in which the deceased possessions are dispersed or destroyed at his/her death, for which there are British prehistoric comparators in the slighted metalwork recovered from sites such as Flag Fen near Peterborough⁴⁰. Beaglehole avers that 'traditional' peoples considered possessions to be imbued with the personality of their owners⁴¹. A similar function for portable material possessions was identified in 1922 by Malinowski in his anthropological study of Polynesia⁴². This, and subsequent archaeological studies of European societies⁴³, observed that the ritualised non-economic 'linear' exchange of objects and artefacts was a social activity that tied communities together: the objects themselves were of no economic or functional value, but their exchange was a matter of public communal obligation. In Polynesia it was large conch shells or 'kula' necklaces; in prehistoric Europe it was *Spondylus* shells: in the Early Christian Hebrides it appears to have been small pieces of white Iona marble that were exchanged, the archaeological occurrence of which at early

³⁹ Belk, 1984

⁴⁰ Pryor, 1991 is a good introduction to this complex site and its landscape.

⁴¹ Beaglehole, 1931

⁴² Malinowski, 1922, p81.

⁴³ for instance: Renfrew, 1969; Shackleton and Elderfield, 1990; Gregory, 1982; Weiner, 1992

Mediaeval monastic *cenobia* indicates an association with the parent monastery and disciples of Columba⁴⁴. Might this also have applied to building materials ?

Ochsendorf has made analogous observations about, for example, the traditional building of bridges in the Andes, in which it is the activity of cyclically rebuilding that is important, not the functional value of them as communications infrastructure⁴⁵.

This echoes Frantz Fanon's opinion that the activity of building of a bridge, for instance, should engage and enrich the communities that use it, as well as its use⁴⁶.

As with medieval Jewish and 17th century Japanese practice, not all construction activity, therefore, has served solely the functional or aesthetic imperatives of architecture. In this respect it is interesting to note that the surviving defensive walls of Roman Wroxeter - *Viroconium* – and Silchester – *Calleva Atrebatum* – incorporate portable stones from the whole of the tribal areas of the *civitates*, possibly tokens of tribute.⁴⁷

To modern Western eyes, therefore, artefacts such as structures and building fabric are functional and/or decorative, but to historical or non-Western communities they can also be the result and evidence of activities with a wider societal function. This, I argue later, has relevance to the medieval and Post-medieval 'trade' in salvaged building materials. It is true that these studies refer to prehistoric or non-European examples, but the link between prehistoric and historical Mediterranean cultures and their architecture is well-established, as is the value of ethnography to archaeology. A culture, in the archaeological sense, is a set of inherited rules, some of which are perpetuated unconsciously long beyond their utility. This applied to building, particularly vernacular buildings then, just as much as it does to, for instance, dress or sex-discrimination now or, in 17th century Britain, the fear of witchcraft.

The subject of *apotropaia* in building fabric is an example of just such an inherited cultural practice and has received more considered analysis. Apotropaic practices involving buildings in ancient Rome and Byzantine and early Ottoman Western Asia are reliably attested by a wide variety of sources, such as Flood⁴⁸ and Ousterhout⁴⁹,

⁴⁴ Aston., pers comm.

⁴⁵ Ochsendorf, 2006

⁴⁶ Fanon, 1963

⁴⁷ Fulford, pers comm., Woodiwiss, pers comm.

⁴⁸ Flood, 2006.

⁴⁹ Ousterhout, 1995; 2003.

but in the main they are dealing with *spolia* in the Classical sense of the word or the reliable certainty of religious relics. Nonetheless, Ousterhout, in his analysis of the recurrent re-use of decorative and, more importantly, non-decorative stones in the many manifestations of the Holy Sepulchre in Jerusalem concludes that the “*architecture (i.e. the material fabric) of the Holy Sepulchre had come to be regarded as sacred, and throughout its tumultuous history the building itself had become a venerated relic. Thus the stones of the Holy Sepulchre were re-employed...in each successive re-construction.*”⁵⁰ The burial place of Christ is obviously an exceptional example, but the practice – as Stevenson has already observed for 17th century London⁵¹ – was not, and much of the cyclic rebuilding of the Holy Sepulchre was done by European contemporaries of the Egyptian Qodesh charity, who eventually returned home.

British apotropaia, unfortunately, is not so well demonstrated. Much has been written about this by Ralph Merrifield⁵² – a respected archaeologist - and more recently by Timothy Easton⁵³, and there is a diverting compendium of similar writings edited by Wallis and Lymer, all averring that medieval and early-Modern Britons ascribed extra-utilitarian properties to inanimate objects and materials⁵⁴. Nonetheless, it is a documented fact that the British of the historical past – in common with all other nations – believed in witchcraft and other manifestations of a spiritual domain, and that such belief presented itself in the ritualised use of personal effects⁵⁵, structures and spaces. For instance, the burial of animal carcasses under thresholds is a commonplace of archaeological sites in Britain generally⁵⁶, with no obvious utilitarian explanation; whilst historical accounts of medieval and later witchcraft⁵⁷ make clear that all openings within the structure of a building - and particularly chimneys - were considered to be potential points of entry for malign spirits. Merrifield, Easton and others present an impressive body of evidence for personal effects being used as prophylactics at those openings, with 'witch bottles' and shoes being the most common inclusion within building fabric and voids. But, whilst Easton asserts that building components, particularly hearth bressumers and other horizontal timbers,

⁵⁰ *ibid*, p13

⁵¹ Stevenson, 2006

⁵² Eg. Merrifield, 1969.

⁵³ Eg. Easton,, 1998

⁵⁴ Wallis and Lymer (Eds), 2001

⁵⁵ cf. MacFarlane, 1970, especially on the 'official' line of James I's *Daemonology*

⁵⁶ the late Romano-British timber buildings at Alington Avenue, Dorchester (Dorset) being merely one example. Cf. Davies *et al*, 2002

⁵⁷ MacFarlane, *op cit*

were frequently marked with 'Marian Crosses' and the letters 'M' or 'V' to invoke the beneficial intervention of The Virgin against those spirits, none of the apotropaia specialists have identified building material *per se* being used in that manner, unfortunately.

Nonetheless, it is incontestable that our forebears thought differently about their world, their place in it and their buildings, than we do. Surely, given the enthusiasm with which bits of churches and monasteries were squirreled away in the mid 16th century⁵⁸ by recusants, or bits of the Boscobel Oak by Royalists, it is likely that the rest of the laity were using salvaged objects and building materials for similar reasons.

Eighteenth century attitudes to such assemblages are illustrated by Ramage's study of the antiquities trade, which demonstrates that acts of salvage, replication and, in some cases, wholesale invention, are historically significant in their own right. She makes the point that "*to most eighteenth-century collectors it seemed to make no difference whether a collection of 'antiquities' was truly ancient or whether it consisted of a mixture of genuine Greek and Roman sculpture, plaster casts, heavily restored ancient fragments, or even outright forgeries.*" Indeed, some considered the 'fakes' to be of better quality than the originals and were prepared to put their money where their tastes were⁵⁹. As Payne has demonstrated, Europeans of the 18th century perceived ancient buildings and monuments in the same way. For the purposes of this study, Ramage's concluding remarks are particularly pertinent: "*The restorers have compelled us to look at ancient sculpture through their eyes, and the student of Greek or Roman art often unwittingly takes in their work without understanding how much of the ancient statue has been created in modern times.*" We need only substitute 'building' or 'architecture' for 'statue' to make her observations directly relevant to the study of salvage in historic buildings. *Spolia*, in the Classical sense, is generally immediately recognisable: Ramage and Payne demonstrate that it need not be. Similarly, Brewer makes the point that the concept of an orderly linear chronological and aesthetic development of architecture - and all forms of art for that matter - was not recognised by the English, at least, until the end

⁵⁸ cf Duffy, *op cit*

⁵⁹ Ramage, 2002, relates the dispersal sale of Shugborough in 1842, at which known fakes attracted three times the price of genuine Roman antiquities.

of the 18th century⁶⁰. That a statue or building was made up of pieces of differing age, provenance and style was of no consequence to an Englishman of the 17th or 18th century, as long as the overall aesthetic affect was agreeable. This has particular bearing on the case study of Bradenstoke Priory, below.

That aesthetic paradigm was also manifest in the manner in which the depiction of architectural ruins changed from the informative views of the late 17th and early 18th century – such as those of the Buck Brothers – to the pleasing romanticised views of the late 18th and early 19th century- such as those of de Loutherbourg. That Romantic imperative was also manifest in poetry and in the architectural embellishment and re-creation of medieval ruins to match their graphical models⁶¹ as exemplified by the Gothic(k) movement, particularly with regards garden architecture and follies. By the mid 19th century, with the emergence of archaeology as an academic discipline, graphical depiction of old buildings – such as those of the Bucklers – had reverted to metrical accuracy and the material fabric of the buildings was being faithfully restored in its primary, chronologically accurate state. So, Rondelet, writing about contemporary France in 1802⁶², considered the 'assemblages' of salvaged columns and old marble plaques that characterised the more fanciful architecture of the 18th century to be "*sans gout et sans art*". But, during the foregoing 'long' 18th century, builders, including those in Britain, took greater liberties with the aesthetics of their buildings. As the case studies demonstrate, those liberties included the use of salvaged structural and decorative materials, the imitation of them and the wholesale creation of new structures derived from them.

Economic history

Given the contribution of construction-related activity to the British economy, it is surprising that economic historians devote so little attention to the costs of building materials⁶³, particularly the use of salvaged materials. Whilst there is much written about the economics of Dissolution and Civil War sequestrations, most of it is

⁶⁰ Brewer, 2013, p371

⁶¹ Brewer, 2013, p461. Woodward (2001) and more recently Musson (2011) explore the fascination of 'ruins' at length.

⁶² cf. Middleton, 2013,p61

⁶³ cf. Machin, 1977

concerned with fluctuations of land value. Little of it is concerned with how wealth was actually transferred or realised, and only Gentiles⁶⁴ and Howard⁶⁵ make the obvious point that those two momentous land transfers benefited a small and well-established minority of the populace, *contra* Hoskins' assertion⁶⁶ that the dissolution of the monasteries was indirectly responsible for the appearance of the 'Yeoman House' in the late 16th and early 17th centuries – i.e. that the Yeoman House was financed by the agricultural income of former monastic land. In fact, the builders and occupants of the typical Yeoman house, like the Parliamentary soldiery of the 17th century, were at the bottom of a very large and complex social and economic pyramid, through which wealth trickled very slowly, just as it does today. Very few, if any, were direct recipients of monastic or Royal land, and even if they were, the transfers were not effected quickly enough to benefit them within the timescale Hoskins suggests. Is it not more likely that the easily transported building materials were the wealth itself, not simply a manifestation of it ?.

But it is also, as several authors comment, because the sources that have survived are often ambivalent about the cost and sources of building materials, whilst for the great many buildings in Britain – large or small – there are simply no reliable sources⁶⁷. Economic history is also, like all other forms of academic analysis, a product of its time: many of the sources dealing with the economics of pre-Modern Britain were written in the first half of the 20th century or in the years immediately following the Second World War⁶⁸ when rationing (including building materials) and the creation of the *parvenu* property developer by the 1947 Town and Country Planning Act were evidently uppermost in the minds of many academic economists.

Nonetheless, Woodward addresses the issue of salvage and his analyses are reasonably up to date, anticipating the topicality of recycling. He is the only authority to identify the economic causes and impact of salvage, with market demand determining whether wholesale salvage was economically viable, especially with regards the European lead mining industry, which he states “*was virtually destroyed*” by the dumping of salvaged monastic lead on the market in the 1530s and 1540s. He

⁶⁴ Gentiles, 1973, p614

⁶⁵ Howard, 1987, p138.

⁶⁶ Hoskins, 1952.

⁶⁷ Cairncross and Weber (1956) point out that, contrary to popular myth, very few British buildings have any historical building accounts, never mind complete sets.

⁶⁸ Doggett's (1997) bibliography makes this self-evident.

also makes the very important point, *contra* Cairncross and Weber (below), that the amount of iron available from secondary sources vastly outweighed the output of primary smelters. As he states “*statistics relating to primary output in any industry may seriously underestimate the flow of ‘new’ products on to the market*”⁶⁹ – i.e. there was more iron available than the records of primary smelters would suggest. Salvage was clearly significant. He also takes a broader look at the issue of natural resources and also raises the issue of taboos, specifically with regards infestation in domestic goods of the Plague years and the embargoes placed on the sale of materials from infected households. He states that “*The recycling of buildings and their constituent materials was commonplace in pre-industrial society*” but he has to rely on secondary sources for his evidence, most of which derive ultimately from monastic or royal examples cited by Colvin, Salzmann or Knowles and Hadcock.

The economic importance of salvaged materials in the 18th and early 19th centuries is implied by Cairncross and Weber in discussing the value of census data to the estimation of building activity. They note that “*The Census data are crude as they take no account of demolition and conversion of houses to other uses.*”⁷⁰ Similarly, Wilson and Mackley report the common practice of reusing materials throughout the 18th and 19th centuries, to the extent that insurance companies estimated re-building costs explicitly on the use of salvaged materials to hand, and that such items occur frequently in building accounts⁷¹.

Archaeology

Archaeology reveals a more nuanced and complete picture of the use of salvaged building materials in the past, in its exposure of buried remains and its analysis of extant structures, largely because archaeology is necessarily concerned with materials. Salvaged building materials are a common discovery of archaeological excavations on Roman and later sites in Britain and of archaeological surveys of extant buildings, whilst even prehistoric sites such as the Iron Age midden settlements of Shetland and Orkney occasionally display evidence of the ‘structured’ – i.e purposeful - re-use of materials such as decorated stone slabs laid face down in

⁶⁹ Woodward, 1985 and 1998

⁷⁰ Cairncross and Weber, 1956

⁷¹ Wilson and Mackley, 1999

later pavements⁷². For the most part, archaeological excavations in Britain are concerned with the foundations of buildings, where we might expect salvaged rubble to be used, rarely their superstructures. And, though salvaged architectural details are visible in the external wall faces of many medieval and Post-medieval buildings, particularly churches, thorough investigation of them is prohibited by the embargo on the destructive dismantling of ancient structures.

Nonetheless, just about every British excavation or survey published in *Britannia*, *Medieval Archaeology* or *Post Medieval Archaeology* will include a catalogue of 'architectural stone' bearing evidence of re-use. Archaeologists treat such materials in much the same way they do fragments of pottery or animal bone: the source of the stone is identified and its original purpose deduced so as to understand the form of its 'donor' building and, if possible, how it was employed in the host building. The quantities of such material are significant, particularly those recovered during the excavations of monastic sites: Given the recurrent re-modelling of monasteries and all other large ecclesiastical buildings, it is surprising how little there is⁷³.

Archaeologists specialising in the analysis of extant buildings adopt a slightly different approach, possibly enforced by the volume of material present. For example, Foot *et al* identify salvaged timber in the roof of Lincoln Cathedral, but accord it no significance⁷⁴; whilst Blaylock, in reporting inconvenient dendrochronology dates from self-evidently salvaged timbers at Bowhill near Exeter, dismisses them as the result of poor sample curation⁷⁵. Similarly, Bridges' dendrochronological survey of Hill Hall (Essex) specifically excludes salvaged timbers, even though the author recognises they derive from earlier phases of the building's development⁷⁶. Generally, archaeological surveys of extant buildings ignore salvaged – or 'residual' – materials, because the archaeologists are concerned primarily with identifying the exemplars of chronological and typological evolution. But there are exceptions, mainly amongst more recent work. Thorpe and Cox's unpublished surveys of buildings in Devon⁷⁷ range in subject matter from

⁷² McKinley, J., pers comm.; Dockrill and Bond, forthcoming.

⁷³ Greenhalgh (2009, p16) suggests that the paucity of salvaged materials in Mediterranean excavations is due to excavator disinterest and negligence: that is unlikely to have been the case in Britain.

⁷⁴ Foot *et al*, 1986

⁷⁵ Blaylock, 2004

⁷⁶ Bridges, 1999

⁷⁷ All 'grey literature' reports accessed at Devon County HER, and will eventually be available through the OASIS on-line library.

medieval manor houses based on monastic complexes, through 17th century townhouses to modest rural homesteads, with many surveyed in states of disrepair allowing inspection of otherwise hidden structural fabric. Salvaged material, mainly timber, is identified frequently and appears to be chronologically and typologically specific: It does not occur in the primary fabric of major medieval or non-domestic buildings of any age; it occurs only in the secondary fabric of major medieval buildings, i.e. in modifications, and in the primary fabric of Post-Dissolution houses, becoming increasingly common in late 17th and 18th century houses and particularly in urban houses. The use of salvaged material, therefore, appears to be selective.

Similarly, Suggett's appraisal of archaeological evidence for medieval peasant 'hall houses in Wales reports the "*removal of architectural features, especially doors, planks and beams, presumably for re-use*" and the wholesale demolition of whole houses for re-use in the 14th century⁷⁸. Suggett also implies a link between that practice of salvage and the absence of 'standing' peasant houses pre-dating Owen Glendower's rebellion of c. 1400. Many were undoubtedly destroyed in the rebellion, but others might have been dismantled as mementoes. Machin, in his re-assessment of Hoskins' 'Great Re-Building'⁷⁹, identifies a similar lack of surviving medieval housing in England and attributes it to a medieval preference for impermanent structures, a topic discussed at length by Messrs Mercer, Smith and Currie in the pages of *Vernacular Architecture*⁸⁰ without resolution. Such a preference would provide the circumstances under which salvaged materials would be in circulation, and possibly why. The present author has encountered similar archival references to medieval salvage and salvage sales at Windsor⁸¹ and More Manor (Herts)⁸² and to late 18th century salvage at Wimborne⁸³.

Other archaeological reports are equally informative, when they are not concerned with typological classification. Bringham's considered analysis of salvaged timbers recovered during archaeological excavations at sites along the banks of the River Thames in the historical core of London exemplifies the benefits of the archaeological

⁷⁸ Suggett, 2013

⁷⁹ Machin, 1977

⁸⁰ Currie, 1988 and 1990; Mercer, 1990; Smith, 1990.

⁸¹ 13th century sale deeds for Thames Street, transcribed in 1987 but destroyed in the fire at St George's Chapel.

⁸² I am grateful to Jacqueline McKinley of 'Time Team' for this reference.

⁸³ The contract for construction of Canford Bridge at Wimborne, completed 1813, places a monetary value on the salvaged and re-usable stone. (Heaton, 2006)

approach⁸⁴. The excavations recovered large numbers of preserved structural timbers from wharfe structures that proved, on detailed recording, to retain the marks of previous non-wharfage uses. Graphical reconstruction and comparison with the relatively small corpus of information on early medieval carpentry demonstrated many of the timber to have been felled for use in buildings from which they were salvaged for use in the wharves. Brigham explained the importance of the recorded details succinctly: *“These 11th and 12th century house timbers are of importance both because of the lack of preserved contemporary material (i.e. standing buildings) and because they survived in sufficient quantity to provide a useful database. The development of carpentry in England is a subject of concern to archaeologists and to specialists in the field of vernacular architecture alike, and the reconstruction of ancient timber buildings from archaeological remains.....has become increasingly popular. However, the resulting reconstructions for the early medieval period are often based on very limited archaeological information.....such as post holes, post trenches, beams slots or padstones. Where structural timbers survive, therefore, either in situ or displaced as in this group, they are crucial aid to such reconstructions.”*

Brigham is being modest in restricting the value of this research to ‘vernacular architecture’: the architectonics of a pre-Modern building were partly dependent on its carpenters, irrespective of its social or artistic status, who had to translate received designs into architectural forms. The evolution of structural carpentry is as important to the historical study of ‘Polite’ architecture as it is to vernacular studies, particularly regarding the translation of designs from continental Europe to Britain in the 17th and 18th centuries⁸⁵. Furthermore, Brigham had no reason to assume the source buildings were vernacular – they could equally well have come from churches or palaces. As Lazanski has demonstrated, more recently, re-used components and architectural details can be used to re-visualise earlier configurations of buildings such as monasteries⁸⁶.

Stocker and Everson’s study of salvaged stone in Lincolnshire⁸⁷ is equally illustrative of the potential of archaeological material. Their study of the re-use of Roman stone

⁸⁴ Brigham, 1992

⁸⁵ The author has recently completed a survey of the roof structure of the mid 18th century ‘Pantheon’ at Stourhead, which retains archaeological evidence of the carpenters’ difficulties.

⁸⁶ Cf. Lazanski, 2013, pp36-62

⁸⁷ Stocker and Everson, 1990

in Anglo-Saxon and medieval churches in Lincolnshire identified three forms of reuse – ‘Casual’, i.e. economic; ‘Functional’, in which structural or architectural elements are re-used in their original function; and ‘Iconic’, i.e. *spolia* in the Classical sense – and concluded that the phenomenon is nationwide and likely to extend beyond their early 16th century cut-off date and ecclesiastical sphere. Their examples of ‘functional’ and ‘iconic’ salvage are directly analogous to the use of *spolia* in early medieval Europe and Western Asia and demonstrate that the practice was alive and well in early mediaeval Britain.

Dennison's work at Sheriff Hutton Castle in North Yorkshire tells an equally informative story of a source building, at two levels. He plots the spatial distribution of re-used castle stone throughout the surrounding villages as well as the wholesale re-use of architectural details and decorative interiors at the nearby Sheriff Hutton House that replaced it after c. AD1590⁸⁸. Whilst the architectural details and interiors were transplanted almost wholesale to the replacement baroque house, the villagers' dwellings generally incorporated only single instances of stone or timber. Such material was not, therefore, being acquired for its functional or economic value, but for its associational significance.

Monastic buildings and their materials, ironically, present something of a conundrum to the archaeologist. Notwithstanding Howard's caveats about the complexity of motives, mechanisms and agencies involved in the dismemberment of monastic estates and buildings⁸⁹, archaeological analysis of the donor buildings is constrained by later remodelling of them⁹⁰, whilst the immense quantities of dispersed materials – with the exception of the odd window frame - have proved elusive to archaeologist and historian alike. It is a commonplace of British history that the monasteries were demolished, in whole or in part, in the second half of the 16th century and their materials sold or otherwise distributed for re-use, but there is relatively little published historical or archaeological evidence of that end-use. This is explicit in, for instance, Preston's 1935 ‘The Demolition of Reading Abbey’ published in the *Berkshire Archaeological Journal*⁹¹, despite it not being an archaeological study at all – it is

⁸⁸ Dennison *passim* includes a large number of popular, academic and ‘grey literature’ reports on his work at Sheriff Hutton from the mid 1990s, the more interesting of which are being summarised in Wright, Richardson and Rakoczy in prep.

⁸⁹ Howard, 1987, p138.

⁹⁰ Howard, 2003.

⁹¹ Preston, 1935

based on documentary sources alone. It is an archetypal transcription of Henrician court records that were created to track the value and sudden depreciation of the sequestered monastic assets, examples of which have been published by just about every County historical and archaeological society in England and Wales⁹². As such, it records the value of Reading Abbey and the value of the materials removed from it, sometimes the recipients, for accounting purposes only, but their destination and use was of no interest to Henry's commissioners and, accordingly, were not recorded.

There is no hint of criminality on the part of the despoilers in such accounts, which are essentially forensic accountants' analyses of the financial diminution of Crown assets. Only where the sequestration became the subject of a separate civil dispute, such as at Hailes Abbey⁹³ in Gloucestershire, did the commissioners of the Court of Augmentations expend effort and time in recording sworn statements and drawing up detailed schedules of materials and their recipients. Nonetheless, as Lazanski demonstrates, the records of Hailes Abbey and others can reveal, *inter alia*, a fascinating evocation of the multi-layered, quasi-criminal complexity of English social life at the dawn of the Reformation; the fluidity with which 'fenced' second-hand building materials moved through it, almost customarily, just as maritime salvage and contraband did⁹⁴; and a rare insight into the levels of comfort and personal privacy enjoyed by monks on the eve of the Dissolution⁹⁵.

Other 'archaeological' studies of the material impact of the Dissolution are generally less enlightening, most being concerned with post-justifying the Reformation or with the architectural achievements of the largely aristocratic beneficiaries of the Dissolution. As an example, Shagan's study of the dissolution of Hailes Abbey⁹⁶ makes the mistake of conflating 'Dissolution' with 'Reformation' (Henry VIII died a shriven Catholic) and, like many others, attributes opportunistic pilfering from an unguarded and semi-dilapidated monastery to anti-Catholic sentiment⁹⁷. Masinton's

⁹² Henry had c. 625 monastic institutions closed, each one of which has been the subject of historical study and many have been subject to archaeological investigation as well: the subject matter is vast.

⁹³ I am grateful to my colleague Dominique Lazanski for sight of her source material on Hailes Abbey, but the interpretations presented here are my own.

⁹⁴ The involvement of the gentry and commonality in maritime 'wrecking', particularly in the late 17th and 18th centuries, is well-documented. I suggest that architectural salvage was no different.

⁹⁵ Lazanski, 2013.

⁹⁶ Shagan, 2002.

⁹⁷ Ackroyd (1994) relates Erasmus' opinion that the average Englishman thought of "*nothing higher than the roof of his house*".

study of the equivalent documentary sources for the Yorkshire monasteries⁹⁸ is equally ambivalent about local motives in the north of England. Despite there being “*Archaeologically, much evidence for the actual process of destroying the monastic buildings..*” and incontrovertible archaeological evidence of lead re-casting and lime re-burning, he is unable to throw any light on where the material went or what it was used for and suggests that the symbolic action of destruction was at least as important as the financial realisation of assets, if not more so. The intention of the 'symbolic' act, surely, is open to interpretation: the removal of materials and structural or decorative elements from socially and ritually important buildings such as monasteries is just as likely to reflect affection as antipathy, as it did in the case of parish churches at the same time⁹⁹. The words 'souvenir' and 'keepsake' spring to mind.

When monastic archaeology does get its hands dirty, it suffers, ironically from the attractiveness of its subject matter to archaeologists and antiquarians alike, a theme I shall return to later in the case study of Bradenstoke Priory. Britain's first antiquarian, arguably, was John Leland, who drafted his *Itinerary* whilst reconnoitring the asset-stripping of the monasteries on behalf of Henry VIII. Ever since, the ruins he unwittingly facilitated have fascinated artists and archaeologists alike, to the extent that few have escaped the depredations of amateur archaeologists and restorers, making authoritative analysis of their buried remains and standing fabric increasingly problematic. Tintern Abbey exemplifies this. Whilst not as economically important as Glastonbury Abbey or as liturgically important as Salisbury Cathedral, it remains the Romantic ruin of the Dissolution *par excellence*, thanks to the landscape and political geography of the Wye Valley. The subject of poetry and landscape painting since the 18th century, it was inevitable that amateur archaeologists and latterly the Ministry of Works Building Conservation Department should seek to objectivise the ramblings of Wordsworth, Gilpin and others. Unfortunately, as Courtney diplomatically observes, the results of excavations undertaken by a range of individuals and organisations as recently as 1980 are effectively meaningless because they were undertaken without stratigraphic discipline, whilst the 'restoration' works of the Ministry of Works proceeded without any form of record at all¹⁰⁰. The same caveat applies to the

⁹⁸ Masinton,, 2008

⁹⁹ cf. Duffy, *op cit*

¹⁰⁰ Courtney, 1984. His report is a 'backlog' publication of the work of others, commissioned by what is now called CADW to legitimise, justifiably, its imposition of publication conditions on grant aid for

results of all excavations of monastic site undertaken prior to c. 1980 and all those undertaken by amateur archaeologists, as Masinton observes in his survey of the monastic archaeology of Yorkshire¹⁰¹.

Nonetheless, Courtney's courteous exposition of the efforts of others makes one significant fact clear – that monastic precincts remained in a constant state of re-ordering and re-building throughout their active lives, a process that must have generated a constant supply of unwanted decorative details, relatively little of which is present in the surviving fabric now. This is a pattern recognised for all British monasteries¹⁰². It is therefore possible, surely, that the opportunistic pilfering of, for instance, Hailes Abbey was merely a criminalised manifestation of a centuries-old custom. That custom undoubtedly had a utilitarian and economic use, but there is sufficient circumstantial evidence in the sources cited above to suggest it also had a social and, perhaps, ritual function. Those monasteries existed and operated within – and reflected – complex socio-geographic systems, of which their religious function was merely a part, albeit an important one¹⁰³. Surely, just as those socio-geographic systems contributed to the establishment, construction and maintenance of the monasteries, they also benefited - or partook – in their cyclic re-building and eventual dismemberment¹⁰⁴. Contra Masinton, the monasteries were dismembered, not solely because of vehement anti-Catholic or anti-monastic sentiment, but possibly because it was customary to do so.

The extent to which the gentry and commonality were also routinely engaged in the despoilation of others' secular buildings is made clear in Rakoczy's studies of the Civil War¹⁰⁵, one of the few genuinely archaeological analyses of historic buildings. She demonstrates that the businesses of structural demolition and dispersal of materials, commercially or otherwise, were skilled and lucrative operations that required established and experienced organisations and a well-established legal framework. The recycling of metals, in particular, was spectacularly lucrative, with £19 expenditure at Pontefract rewarded with £1,577 of sales, most of it going to

archaeological excavations. The same policies apply now in England, Wales and Scotland and state heritage bodies of those countries continue to publish backlog excavations.

¹⁰¹ Masinton, *op cit.* observes that archaeological evidence of material re-cycling is identified only in recent excavations.

¹⁰² Cf. Keevil and Aston, 2001.

¹⁰³ Howard, 1987, p142; Luxford, 2014

¹⁰⁴ Cf. Lazanski, 2013, p65.

¹⁰⁵ Rakoczy, 2007, is her PhD thesis. She also edited a book of the same title in 2008.

distant purchasers. She observes that “ *the removal and resale of castle materials opens up new questions about contemporary attitudes to second-hand building materials .Many of these centre around the development of timber and lead ‘markets’*”; that “*recycling was a crucial part of pre-Industrial England’s economy*” and that, with respect to timber, “ *numerous accounts (i.e. other historians’) refer to its dismantling and sale...but that...the logistics of how it was carried out has received little critical attention.*”

It is highly improbable, surely, that the technical and redistributive capabilities necessary for the destruction and resale of, for instance, Pontefract Castle sprang up ‘overnight’ in the midst of Britain’s bloodiest ever civil conflict. They must have been long established and well-rehearsed practices, undertaken by specialist concerns. Indeed, they could have added a commercial dimension to many of the ostensibly strategic decisions of the Civil War, worthy of scenes from *Catch 22*. Furthermore, she avers that salvage and re-use also had extra-economic significance to 17th century Britons. In the quasi-religious context of the Civil War, the appropriation of a rival’s or enemy’s building fabric and other property was an acceptable alternative to complete destruction of otherwise desirable residences – a sort of totemic destruction or structural ‘potlacht’. She also suggests that salvage of a better’s building materials was an “*older tradition of English popular revolt against the manifestations of authority*”, and one that Parliament and the judiciary were surprisingly tolerant of and familiar with¹⁰⁶. Is this not the architectural and post-medieval manifestation of the ‘linear’ exchange systems identified by Malinowski, Aston and others, referred to earlier.

Bernard *et al* provide useful foreign comparators and perspectives from the other side of the Channel in *Il Reimpiego*¹⁰⁷. This collection of conference papers broadens and advances the study of salvage in countries bordering the Mediterranean by moving beyond the iconographic and art historical biases of Classical and Renaissance *spolia* studies to examine the use of salvaged building materials as a cultural phenomenon in the archaeological and anthropological sense: i.e. the material remains of an activity illustrative of the totality of a society, not just the more refined elements of it. Hence their use of the Italian ‘*Reimpiego*’ - ‘re-use’- rather than ‘*spolia*’. The papers present detailed analyses of just how widespread

¹⁰⁶ Cf. Shedd, 2000,.

¹⁰⁷ Bernard *et al* (Eds), 2008.

salvage has been – geographically and chronologically – and the circumstances under which it has been used, and why. Though concentrating on the remodelling of French and Italian structures¹⁰⁸ with Roman material - imported and *in situ* - and the subsequent re-use of their materials, all the conference papers presented in it are of direct relevance to Britain, partly because there was Roman building fabric standing in Britain until the late 18th century and there is no reason to believe that British builders treated it any differently than their Continental counterparts. The majority of the papers catalogue the endemic re-use of Roman and medieval material in later buildings, along the lines already identified by Alchermes, Greenhalgh and others, that illustrate the manner and extent to which salvaged materials would have been employed within the vicinity of Roman buildings in Britain. Three present a more considered historical analysis of the circumstances in which it was done, that are more relevant to this thesis: Philippe Bernardi's 'Le Bati Ancien Comme Source de Profits'; Robert Carvais' "'Redivivus....". Le Reemploi des materiaux de Construction a Paris Sous L'Ancient Regime'; and Paolo Fancelli's 'De spoliis in fictas ruinas'.

Bernardi observes that 'salvage' is difficult to identify in historical sources¹⁰⁹ because the terminology applied, then, is opaque and variable, but he cites several medieval and early Post-Medieval French examples of contractual salvage and re-use, but only one British example, taken from Colvin's *Building Accounts of Henry III* about Winchester Castle. Significantly, he observes that salvage was not necessarily cheaper in the 14th – 17th centuries, but was attractive during times of scarcity and disruption, such as during the wars that frequented continental Europe far more than Britain. Nonetheless, the practice he demonstrates to have been widespread in medieval and Post-Medieval France is directly comparable to the Welsh and English examples cited above¹¹⁰.

Carvais' study suggests that as many as 30% of medieval French building contracts specified the use of salvaged materials, exactly as at Wimborne¹¹¹. Carvais' study also examines treatises on construction practice and architecture, noting that Vitruvius himself used the term 'Redivivus' and extends Bernardi's analysis into the

¹⁰⁸ It also includes papers on salvage in India between the 8th and 12th century AD and in Mamelouk Cairo

¹⁰⁹ But see Melo, and Ribiero, 2012, whose brief account of medieval construction finance in Portugal cites explicit references to salvage as an indirect, but commonplace source of finance.

¹¹⁰ Suggett, *op cit*, McKinley pers comm.

¹¹¹ Heaton, 2006.

17th and 18th centuries. He observes that such treatises rarely concern themselves with materials, echoing Krufft's opinion ¹¹² that "*material is clearly subordinate to form*" at this time, but that the use of salvaged materials is specified, or at least implied, in many of them and is addressed specifically by Roman Law and the statute law of France. He also makes clear, unintentionally, the longer history in France, than Britain, of legal control of construction practice and writing about it, citing Bullet's 1691 *L'Architecture Pratique* - one of the first to deal with the financial control of construction - as an example of a treatise addressing the issue of salvaged building materials¹¹³. He argues that salvage was a substantial trade in France by the end of the 17th century because of the large numbers of ruinous buildings dotting the war-torn landscape – a circumstance that would have been depressingly familiar to late 17th century Britons.

Fancelli's paper is the shorter of the three, but it makes the intriguing observation that *spolia* constituted and informed the design of '*fictitious ruins*' – i.e. follies, including 18th century examples in Britain¹¹⁴, and that those follies were influenced by Classicism and by homegrown movements such as the 'Celtic Revival' – i.e. the Gothic(k). Furthermore, Fancelli avers that to 18th century European writers on garden design such as Diderot, de Girardin, Morel and Pindemonte, a folly incorporating *spolia* was an essential component of *I giardini inglese*. It seems that European historians are – and have always been - more aware of the British use of salvaged materials than the British themselves: neither 'salvage' nor 'spolia' appear in the pages of *Garden History*.

Summary

Current understanding of the historical use of salvaged building materials and architectural details in Britain is fragmented and incomplete compared to, for instance, France or even Ireland. The gaps in our knowledge are partly a reflection of the limitations of the academic disciplines through which the historical use of salvage has been studied, but they are also inherent to the primary source material on which

¹¹² Krufft 1994, p86

¹¹³ See also Hernu-Belaud, (2012) about Bullet's *Architecture Pratique*

¹¹⁴ Citing Woodward (2008) he refers to a pyramid built by a Revd W. Clubbe at Brendon in Sussex. This is not itemised by Headley & Meulenkamp and the author has not been able to identify it, though it might be the monument to John Fuller in Brightling churchyard.

those studies are reliant. Though poorly represented by mainstream architectural history, other disciplines present fleeting glimpses of a material of considerable economic value, as a resource and possibly as a *de facto* alternative currency, the use of which appears to have served socio-political, functional and aesthetic purposes.

Passing references in Colvin, Salzmann, Airs and others, together with the more detailed analyses of Howard, Brigham, Stevenson, Lazanski and Stocker and Everson, suggest that the use of salvaged building materials has been widespread in Britain since the Middle Ages at least, with some building elements such as timber frames being used repeatedly in a modular fashion; Howard avers that it was a familiar form of “*wider interchange*” in Post-Reformation England, whilst Rakoczy and Harris demonstrate that by the 17th century it was being undertaken on a near-industrial scale by specialist contractors and dealers, possibly in response to environmental pressures; and by the 18th century, Fancelli tells us, salvaged materials and architectural details had become an essential component of Romanticised buildings and ruins and designed landscapes known as ‘English’ gardens, and such use has been observed at Stowe and Parham House.

There is circumstantial evidence in the post-Reformation treatment of monastic and ecclesiastical buildings and their fabric that Recusants, at least, attached associational value to the identifiable building fabric of their forebears and betters; whilst ethnographic and archaeological comparators suggest that salvaged materials might also have had extra-utilitarian value as a sacrament of social hierarchy and as apotropaia, as Stevenson observes in 17th century London; and that embargoes on the use of salvage, such as in pre-Meiji Japan, constrained technological and architectural dissemination and development, which alerts us to the possibility that the opposite might have been the case in salvage-using cultures such as Britain.

To what extent is that complex milieu reflected in the material fabric of extant buildings, particularly those of a more humble status than the set-pieces and monasteries studied by Stevenson or Howard ? To answer this question this study will now turn to a series of case-studies from south west England.

CASE STUDIES

Selection criteria

Most of the buildings surveyed by the author incorporate salvaged building materials to a lesser or greater extent. It is less evident in specifically agricultural and industrial buildings, and most evident in 17th and 18th century domestic buildings, but identification of geographic or temporal patterns has not been attempted. In most cases the use was undoubtedly opportunistic and economic: the material was readily to hand and probably cheaper than the new. Several buildings, however, present instances of extraordinary use that cannot be explained, easily, by reference to economic criteria alone. A selection of those instances are described below, together with summary contextual information on the histories of the buildings and their owners¹, where known. The buildings are domestic, agricultural, manorial, ecclesiastical and monastic.

Small buildings

In case the literary references to salvage appear restricted to the upper end of the socio-economic spectrum, two smaller buildings demonstrate the practice permeated all levels of the hierarchy, at least in terms of building scale. Like most buildings of this size and apparent status they are historically anonymous, appearing in the standard historical cadastral surveys for England – the enclosure and tithes surveys of the late 18th and mid 19th centuries – but in little else. Unlike most large houses, there are no primary historical sources specific to them, but they are arguably more representative of the lives of most Britons than manorial houses and they indicate the prevalence and architectural influence of wholesale salvage.

No. 56 Market Place, Warminster

Salvage at its most utilitarian is demonstrated by this unprepossessing building, built within a yard at the back of the Market Place of the small market town of Warminster in Wiltshire, between 1783 and 1840 (Figure 1), at a time when the town was

¹ 'owner', for the purposes of this study, means the fee simple owner or the tenant-in-chief.

growing spatially and economically. The arrival of the army as a permanent presence during the Napoleonic Wars² and the growing value of Warminster malt to the increasingly industrialised brewing industry of southern England brought money and people to what had hitherto been merely one of many woollen entrepot within the chalk downland of Wiltshire³.



Figure 1. No. 56 (windows open) Market Place, Warminster. Note low-pitched four-sided roof .

Nonetheless, No. 56 Market Place is historically anonymous. It appears in outline on the enclosure and tithes surveys of 1783 and 1838 when it was owned – like most of the town – by the Marquis of Bath until the early 20th century, but other than deeds and rentals, there are no primary historical documents of its construction. Archaeological analysis reveals it has enjoyed many uses: Incorporating a pre-existent boundary wall and probably built as a stables and cart shed, it was converted to domestic use in the later 19th century, given an external staircase and cosmetically refurbished with masonry window frames and an entrance archway

² The army commenced training on Salisbury Plain above Warminster in 1793 and have remained a major economic and cultural influence ever since.

³ Daniell, 1879

matching the architectural detailing of the re-faced Market Place building to which it became attached.

Its interest to this study lies in its roof structure (Figure 2). No. 56 is a rectangular building of 'vernacular' dimensions, i.e a roof span of less than 8m dictated by the optimum length of cultivated oak and elm bolls. But, rather than the simple pitched roof structure of principal rafter trusses or collar-tied couples that are found in most other late 18th – early 19th century buildings in the area, it is covered by an open-well roof formed of four half-height ridges around a central inverted pyramidal well - i.e. there is a pitched roof of closed couples for each of the four eaves – of a form commonly employed on large square Georgian houses⁴, albeit in miniature. The central well bears on a single, 400mm square, boxed-heart beam that spans the full width of the building and carries a box gutter through which the inverted pyramid was originally drained. All the roof timbers were of oak or elm and all retained multiple redundant details such as mortices and tenons, so were self-evidently salvaged, some of them several times.



Figure 2. The roof structure, showing inverted pyramid central well. The joists above the well are a 20th century flat-roof modification.

⁴ The “*neat compact little boxes*” of Colen Campbell *et al* invariably utilised this form of roof to span large spaces without creating disproportionately high or shallow-pitched roofs.

The roof structure is unnecessarily complicated and, in terms of performance, is no improvement on the normal pitched roofs of the buildings that surround it. On the contrary, its inherent rainwater disposal problems eventually lead to its structural failure. Building it would have involved four times as much carpentry, a great deal more - and expensive - lead soakers and some fiddly slate cutting in return for a slightly lower ridge height. It was probably no cheaper than a conventional roof built of new timber and no self-respecting 18th or 19th century builder or carpenter would have built it like that out of choice. Indeed, using the four ridges as purlins and inverting the central 'well' upon them would have produced a normal fully hipped roof with 'broken' rafters – a relatively common 18th century form in the counties east and south of Wiltshire⁵. The roof form was therefore adopted consciously.

It is important not to make too much of a single instance of abnormal practice, especially at this vernacular level. Superficially, the roof is merely a good example of the economic value of salvaged materials, particularly in buildings that were themselves of relatively modest economic value. No doubt a sufficient quantity of salvaged timber was available at the right time and place, and opportunistic use made of it. Recognising its necessarily shorter functional life, the builder avoided mixing good new timber with it, expecting the whole structure to be replaced in due course, whilst at the same time adapting the roof form to the median length of timber available. This is an example of Stocker and Everson's 'casual' and 'functional' use of salvaged materials, consistent with patterns identified by Rakoczy and, in France, Bernardi and Carvais.

As the roof timbers are of a similar quality to those forming Tindalls Cottage⁶, and Longleat House was in a state of near constant refurbishment during this period, it is not impossible that the timbers, like the revetment timbers of London⁷, are relics of the Elizabethan prodigy house or its monastic precursor and, as such, are a monument to the former feudal relationship of Lord Bath to his urban tenants and archaeological evidence of the earlier forms of his mansion. Pushing the evidence further, we might deduce a willingness to dispense with inherited vernacular tradition when circumstances allowed. It would have been possible to build a better, standard

⁵ For instance: Priory House at Christchurch in Dorset (c. 1763) has a roof of exactly that form, with the common rafters 'broken' at the side purlins.

⁶ Thompson, 2013.

⁷ Brigham, 1992

hipped, roof with this timber, but the builder – or his patron – opted for an unconventional form that superficially emulated the shallower pitched roofs of the edge-of-town villas emerging at the time. It is unlikely that new timber would have been halved in length to fit this roof, which would have limited its re-sale value, as well as complicating construction. The roof form, therefore, was influenced by the length of salvaged timber available, but not solely by that: there was an element of aesthetic – or at least structural - expression, albeit one stimulated by the use of salvaged materials. It is suggested here, therefore, that the use of salvaged materials, as well as answering a simple economic imperative, influenced the architectural form and structure of the building. That manner of influence has not been identified by Bernardi, Carvais or, indeed, anyone else.

No.28 High Street ('Beekeepers'), Shalbourne, Wiltshire

The role of salvaged materials in the development of structural and architectural forms is demonstrated more convincingly by this modest rural house. Shalbourne in northeast Wiltshire was a royal manor until the Dissolution, after which it passed through several secular estates until sold by the Marquis of Ailesbury (still a dominant landowner) in 1929. Throughout that c. thousand years it appears to have functioned essentially as an estate village – i.e. a dormitory for estate workers and is historically notable solely as the birthplace of the 18th century agricultural innovator Jethro Tull.

The village's lowly status is reflected in the form and date of its historic buildings, the grandest of which is the parish church. The remainder are of modest scale and vernacular form, generally in brick and of 18th or early 19th century date, with individual examples of late 17th century construction incorporating timber frames. The generally late construction date and vernacular form reflects late popular acquisition of land and wealth in Wiltshire compared to, say, areas of Dorset where private enclosure established 'yeoman' farmsteads from the middle of the 16th century onwards⁸.

⁸ Taylor, 1970



Figure 3. 'Beekeepers', Shalbourne. Note the asymmetric ground floor fenestration

No. 28 High Street – also known as 'Beekeepers' – is an 18th century brickwork house (Figure 3), unremarkable for this part of the county except for the asymmetry of its principal elevation, internal layout and the scale of its central open-well newel stair, which takes up nearly 30% of the house's floor space. Cartographic evidence demonstrates that the house was built between 1717 and 1805 on the site of an earlier building that itself might have been built in 1711, if the numerals scratched into a brick inverted in the foundation plinth are taken at face value.

As with the majority of domestic buildings in the village, the external structural walls are of solid brick construction and the internal partitions are stud frames infilled with brickwork. However, whereas most other buildings of its scale and type have narrow winder stairs positioned at one end of the central stack, No. 28 has a substantial dog-leg staircase contained within a free-standing structural frame of oak that could feasibly have been built independently of the rest of the house. In size and construction it is quite unlike anything else in the village. Its main structural elements (Figure 4) – four full height wall posts with angular jowled heads, resting on sole plates –enclose and support the staircase and the roof structure

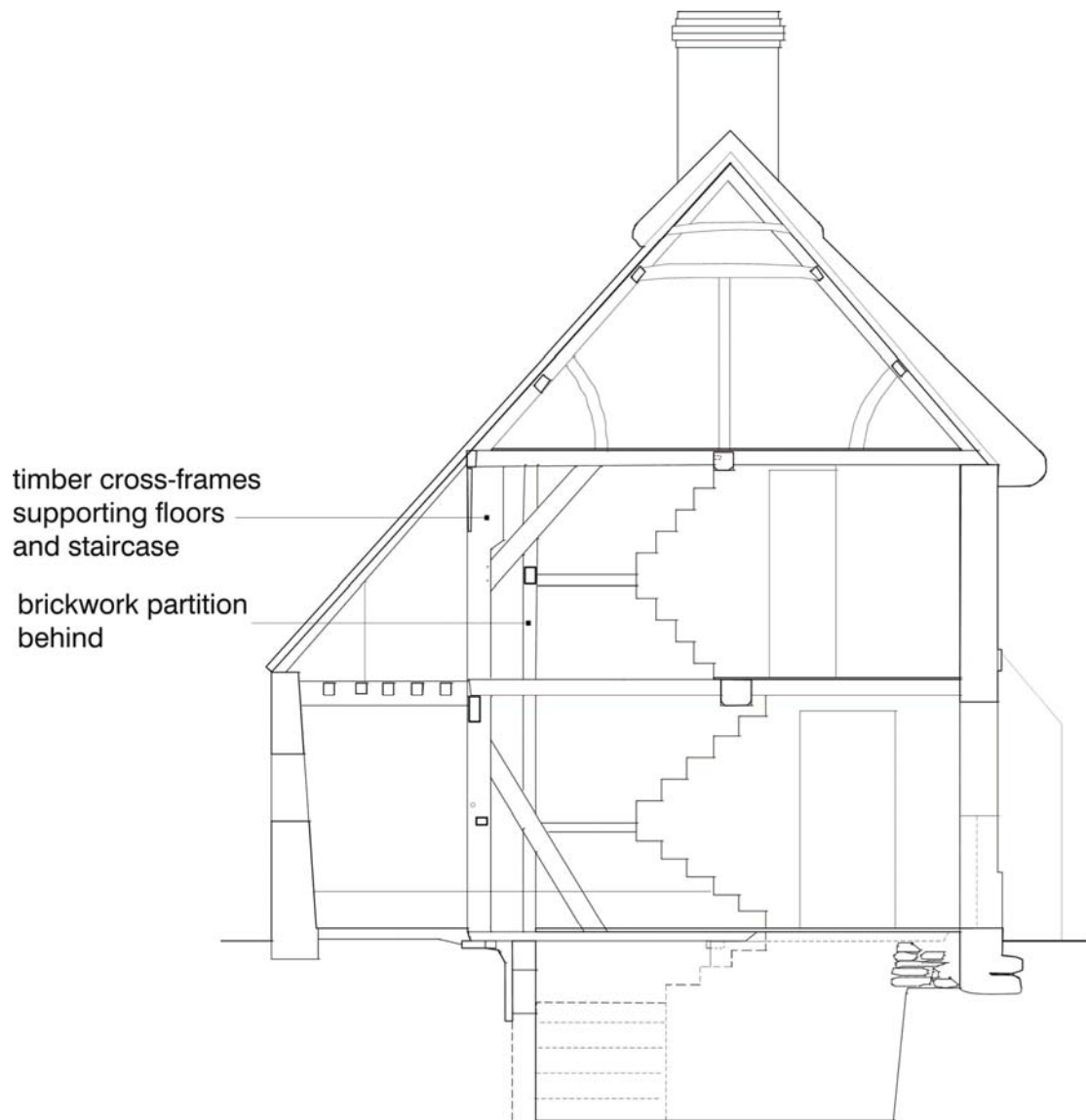


Figure 4. Section showing the re-used timber frame members in the back of the staircase. The front uprights have been omitted to show the longitudinal axial floor beams.

With the wall finishes fully removed it became apparent that the structural timber members display highly differential wear patterns, some being heavily scorched whilst their immediate neighbours were not, whilst the structural connection at the top of the wall posts was abnormal for 18th century construction⁹. The differential scorching, alone, indicates that the frame had been salvaged from a fire-damaged building and re-assembled for use in No. 28, together with other smaller scantling timbers used in the partitions. Its angular jowls suggests it was first constructed in

⁹ In 'normal' assembly from the Middle Ages until the early 19th century, the wallplate lies in a trench at the back of the jowl, with the tiebeam lying on it. In this case, the tiebeam and wallplate lay at the same level, with the tiebeam abutting the face of the wallplate.

the late 17th or early 18th century¹⁰, whilst cartographic evidence demonstrates it was incorporated in this building sometime between 1717 and 1805.

Ordinarily, we might expect such structural timbers to be re-employed individually as floor beams, but in this case the salvageable elements of the donor cross-frames had been re-assembled - albeit mixed – to form a structural framework for the over-sized dog-leg staircase. This represents, surely, more than simply the opportunistic use of salvaged timber, because it necessitated - or facilitated - the design and construction of an atypical staircase and building layout. It would undoubtedly have been easier, cheaper and more space-effective to have adhered to vernacular practice by constructing a narrow winder stair in one of the internal corners, even with salvaged timbers. The salvaged frame might have been free, but its use necessitated construction of a larger than normal staircase that took up 30% of each of the three floors, consuming a larger amount of high grade joinery timber and floor space. Nonetheless, the staircase lent the interior of the house an air of grandeur not evident in its external appearance, implying architectural and/or social aspirations.

What cannot be deduced, is which came first: the concept or the materials. As none of the comparable buildings in the village have stairs of this form or scale, it would be reasonable to conclude that the design of the staircase and house were determined by the materials. The use of salvage, therefore, in this instance led directly to architectural and structural innovation beyond the 'casual' and 'functional' needs codified by Stocker and Everson¹¹ and in a manner not identified by Bernard *et al*¹². As with Tindall's Cottage and No. 56 Market Place, there was a donor building and owner: in this case, the most likely candidate was the formerly feudal lord of the manor, the Marquis of Ailesbury who owned this site and most other land in the village.

A farm

Building surveys of Thorpe and Cox¹³ suggest that salvaged materials are rarely used in agricultural buildings – i.e. barns, granaries and shippens etc. – at least in Devon and Cornwall, and the author's own observations support that broad analysis.

¹⁰ However, the author has just surveyed a similar structure dated by dendrochronology to c. AD1500.

¹¹ Stocker and Everson, *op cit*

¹² Bernard, *et al*, *op cit*

¹³ See above

However, one farm complex differs remarkably from that pattern. Netherhams Farm - a rambling group of 19th, 18th and late 17th century farm buildings near Langport - is one of Somerset's more intriguing and archaeologically complex architectural ensembles¹⁴, encompassing the deserted medieval village of Nether Ham, an extensive landscaped garden, a miniature church and the sites and material remains of two uncompleted baroque mansions.

It was chosen, in the late 16th century, as the site for the mansion house and adjoining gardens of Edward Hext, an MP and active lawyer of puritan sympathies, albeit one who remained solidly within the Anglican confession, and sponsor of Wadham College Oxford. The mansion was accompanied by, and overlooked, a $\frac{3}{4}$ scale Perpendicular church that was probably the last built in that style and was described by the Revd Collinson in his 1791 topography of the county as the '*finest in the west of England*'¹⁵. The fate of the Hext mansion, unfinished at Hext's death, is not known, but it was evidently demolished. In 1689 the estate was inherited by his Catholic son-in-law John, Lord Stawell who commenced construction of an immense mansion to rival its predecessor, to house and impress his wife Margaret Cecil, daughter of the Earl of Salisbury. It is depicted on a cadastral survey (Figure 5) of 1779 for later owners – the Mildmay's, also major landowners in the southwest and prodigious builders whose ancestors had been, *inter alia*, Auditors of the Court of Augmentations at the Dissolution. That survey also records the presence of a lone dovecote on the summit of the hill that overlooks Nether Ham from the south, and annotates the mill stream that now meanders into nearby village of Wearne as 'Paradise' – i.e. a landscaped stream¹⁶.

Colvin deduces French influence in the design of the house¹⁷, possibly the hand of one Jacques Rousseau (1630-93) whose works include Royal palaces in France, but the stylised elevation shown on the 1779 survey is clearly of a baroque English house.

¹⁴ Wilson-North, 1996; Bond and Iles, 1991; Aston, 1978; Leech, 1978; Colvin, 2001

¹⁵ Collinson, 1791

¹⁶ Brown, 1999.

¹⁷ Colvin, 2001, op cit, p33

Stawell died in 1692, possibly in the Tower of London¹⁸, with the mansion unfinished, and the Mildmay's later moved most of it to their house at Hazlegrove¹⁹, but it survived as a picturesque ruin until as recently as 1925²⁰.



Figure 5. Dunne's Survey of 1779. The church, barn and Stawell mansion are clearly shown in elevation

¹⁸ Collins and Brydges, 1812

¹⁹ Dunning, 1974, pp 80-91

²⁰ Wilson-North, *op cit*

Colvin draws particular attention to the re-use of material from Netherham at Hazlegrove, and, in his opinion, the survival of architectural details of the mansion *in situ* within the fabric of the extant farm yard walls. Close examination reveals that many of those details cannot be *in situ* relics of the mansion because they are arranged more or less randomly – horizontally and vertically. Nonetheless, the main barn and adjoining walled yard, present in 1779, (Figure 5) incorporate a great deal of decorative architectural masonry positioned for maximum visual effect in the outer faces of the barn and throughout the yard's walls, some of it – such as window openings – utilised functionally. Indeed, the main barn is distinguished from all other agricultural buildings by the large number of mullioned three-light window frames within its walls, principally those facing the Stawell mansion.

But the majority is purely decorative (Figure 6), especially that employed in the farm yard walls, which incorporate large numbers of column fragments, some defining purposeless door openings with thresholds c. one metre above ground level. It would be correct to refer to these as *spolia*. In the example shown below (Figure 6), the two elements have clearly been assembled in a non-functional arrangement in the barn wall. The four-centred door opening was possibly functional, but the labelled window frame surmounting it is not present in the inner face of the wall: it is purely decorative and abnormal. The barn and yard wall were present, together with most of the Stawell mansion, in 1779, so the *spolia* probably came from the Hext mansion. It is of Ham stone, which contrasts strongly with the grey of the local Blue Lias rubble that forms all other buildings in the farm and the wider area²¹, making it highly visible. It survives as the only indicator of the architectural detailing of Hext's mansion.

²¹ including the re-located elements of the Stawell mansion.



Figure 6. Salvaged, but non-functional, door and window elements in the main barn at Netherhams Farm

It is reasonable to assume, therefore, that the barn and the rest of the farm complex was built c. 1689-1692 for Lord Stawell, incorporating *spolia* robbed from the ruins of his predecessor's house, possibly under the supervision of a French architect. The Stawells were Catholics who had supported the Stuart cause during the Civil War and the Glorious Revolution, with John Stawell possibly dying for his allegiances. They retained most of their land during those difficult times, but by the mid 18th century had amassed substantial debts and fines and were forced to sell much of

their Somerset estate. Stawell, therefore, had good reason to proclaim his family's legitimacy in any way he could and in that regard, his use of *spolia* is analogous to that of his religious and political counterparts in Ireland²². As a Catholic, Stawell would have been sensitive to the iconographic value of salvaged architectural details, even those of his Protestant in-laws²³. Whilst his father-in-law's door and window cases clearly had no religious significance, they might well have been on a par with the fragments of the Boscobel Oak treasured by his fellow Royalists, if only as an architectural expression of his new coat of arms - Hext and Stawell 'impaled'. To return to Stocker and Everson's classification, this is undoubtedly an example of 'iconic' re-use, albeit not an overtly religious one, and was immediately comparable to contemporary continental practice.

If Colvin is correct, Stawell's mansion was designed by a Frenchman who would almost certainly have been familiar with the architectural treatises – and probably practices – of the Italian Renaissance with regards the use of *spolia*. It is also possible that, as a Catholic, Stawell had known of them as well. Rousseau might have had difficulty persuading his English patron to adopt a foreign architectural template for the mansion during difficult times, but the farm buildings facing it might have been an acceptable canvas on which to display their shared appreciation of fashion. As Malcolm Airs explains, in relation to English country houses of the late 16th and 17th centuries, to its owner, the country house of the late 16th and 17th century was "*...symbolic of his knowledge and intelligence, as well as his wealth and power....The cultural contemporary mind delighted in anything that was strange or curious, particularly if it were later revealed to have hidden meaning..*"²⁴

Furthermore, the agricultural buildings at Netherhams Farm were a more public stage for Stawell's architectural aspirations than their present redundant farmyard setting suggests: they stood at the door of the parish church built by Hext and, if the 1779 survey is reliable, within a larger architectural landscape that included dovecotes, windmills and landscaped streams. The whole parish and all of Stawell's visitors would have seen them. Whether the salvaged architectural details at Netherhams Farm had hidden meaning will have to await more detailed analysis, but it is certainly a hitherto unrecognised instance of late 17th century *spolia* in the Classical and

²² cf Moss, *op cit*

²³ But as Gardiner (2013, p324) observes with respect to the Lutheran J.S.Bach, symbolism affected everyone in pre-Enlightenment Europe, Protestant and Catholic.

²⁴ Airs, M., 1979

Renaissance sense. Like the elliptical archway it accompanied, it is evidence of southern European cultural influence in 17th century Britain outside London and the Court, apparently exercised through the agency of Catholicism .

Manor houses

Cockington Court, Devon.

Cockington Court (Figure 7) is a large multi-period house with a medieval core, remodelled and added to in 1577, 1673 and 1820²⁵, the latter episode removing an entire storey and installing a new softwood roof. It had been owned by only three families between the Norman Conquest and 1932, when it was transferred to public ownership: Fitzmartin (c. AD1066), Cary (c. AD1394) and Mallock (c.AD1654). Nothing is known of the Norman Fitzmartins involvement with their sequestered Saxon estate. The Cary family became major landowners in the southwest who sailed very close to the wind during the political and religious vicissitudes of the 17th century, forfeiting Cockington Manor after the Civil War and whose Catholic members continued to lend their support to the 'wrong side' after the Glorious Revolution²⁶. They built the core of the present building and acquired nearby Torre Abbey²⁷ after the Dissolution, to which they moved in 1662, ceding Cockington Court to the Mallock Family. The latter were a small Devon family who had risen rapidly during the early 17th century to become wealthy merchants, chiefly at Exeter. After their acquisition of Cockington they continued their progress, becoming prominent, active and politically astute lawyers and parliamentarians throughout the 17th and 18th centuries, as well as dilettante historians.

²⁵ Lang, 1971; Mallock, 1895

²⁶ Watkin, 1920.

²⁷ Jenkins, 2010



Figure 7. Cockington Court, Devon

The building's interest to this study lies in the structure of its first floor. It has been dated to AD1673 on historical grounds²⁸ and there is no reason to doubt that basic construction date, so it was installed under the ownership of the Mallocks. Visual examination of its structural members reveals the majority of the beams and joists to have been salvaged from a building – or buildings - of slightly different dimensions, whilst dendrochronology suggested a date of AD1599 for the typologically earliest of them²⁹. The whole floor structure, covering an area of c. 227 square metres, had been used elsewhere before its installation at Cockington Court.

That the timbers are salvaged is evident in the wide range of joint types, the survival of tenon stubs and pegs in numerous redundant sockets (Figure 8) and the misalignment of those sockets with the existing joists and other elements such as partition walls.

²⁸ The floor fits the floor plan created in 1673, as indicated by a date stone in the northernmost gable of the front elevation.

²⁹ Bridge, 2011



Figure 8. Detail of relic socket in re-used floor beam

Many of the joint and moulding details are consistent with the late 16th century date of the oldest parts of the building, so some of the timber could plausibly have been re-located from within it, but not all of it: The quantity of timber involved is too large and some of the primary joists and sockets are of 17th and early 18th century form. It is

also unlikely to have been dropped down a floor in 1820: the roof added at that time was of wholly new softwood and it is reasonable to assume a new floor would have been similarly constructed. Most of it, therefore, must have been brought in from another building or buildings. The beams are too long, massive and numerous for a domestic building, so the most likely candidate is nearby Torre Abbey, which the Cary family acquired shortly after the Dissolution and used as their principal residence from c. 1662, adapting and developing it into the grand mansion it has become. However, dendrochronology demonstrates that most of the floor structure was first assembled c. 50 years after the closure of the abbey, and remained in their primary setting for less than a century.

If Torre Abbey was the source, it was being maintained and remodelled at great expense two generations after the Dissolution, by the Carys. That episode of remodelling fits exactly with patterns identified elsewhere by Howard, Doggett, Rakoczy and Lazanski³⁰. The complexity of some of the joints in the Cockington timbers suggest technological as well as architectural experimentation, whilst their presence here suggests several of those episodes of architectural remodelling of Torre Abbey are probably no longer evident in the surviving fabric of that building. Of course, it is possible that the timbers came from elsewhere, but their character and the historical relationship of the two buildings makes that less likely.

This is, at one level, economic salvage on a grand scale and one that potentially illustrates the political and religious upheavals of the 17th century, alluded to by Rakoczy³¹ and others. The chronology might be inexact, but it is clear that within 20 years of Cockington Court changing hands and within 10 years of the Cary Family moving into Torre Abbey, large amounts of salvaged timber - probably sourced from Torre Abbey - were being incorporated in Cockington Court. Whereas the historical analyses of Rakoczy³², Colvin³³ and Airs³⁴ and others generally identify the source of salvaged materials but not the end-users³⁵, the salvaged floor structure at Cockington Court is an example of just that.

³⁰ Howard, 2003 and 2007; Doggett, 1996; Rakoczy 2007 and 2008; Lazanski, 2013

³¹ *ibid*

³² *ibid*

³³ Colvin, 1963, 1982 and 2001

³⁴ Airs, 1979 and 1995

³⁵ Lazanski (2013) is a singular exception

As Rakoczy³⁶ has demonstrated, the trade in salvage involved all sections of British society. In the case of Cockington, the social and economic context of the trade – or movement – is complex. The Cary Family were Royalists and several were Catholics, who continued to support the Stuart cause after the Civil War, eventually losing Cockington Court and most of their other estates as a result of their loyalties and their debts. The geographic proximity of Cockington to Torquay, where William of Orange landed in 1688, is poignant in that regard. Nonetheless, they were an old family and part of the social and political fabric of the southwest. The Mallocks, on the other hand, were parvenu merchants, financially and politically independent. The sale – or otherwise – of salvaged material from Torre Abbey to Cockington Court therefore moved down the social hierarchy, but up or across the new economic and political hierarchy.

The Carys at Torre Abbey might have benefited economically from a sale, but this might also have been an example of Belk's '*conspicuous waste*'³⁷ enacted publicly by the recently disposed family as a last act of *noblesse oblige* that confirmed their customary role despite their reduced circumstances. The floor structure would not have been visible as an *in situ* structural component of the house, but its re-location from Torre Abbey to Cockington would have been a highly visible public spectacle, possibly a public undertaking. It would have been immediately understood by the 17th century society accustomed to religious and royal processions³⁸. What did the Mallocks gain, other than a cheap floor? It is unlikely that their motives were purely financial. Possibly, they gained the additional associational value of fabric from a major religious house, to add to their new acquisition. Is it also possible that the use of salvaged materials was a studied public exercise in frugality and conservation, intended to contrast them with their dissolute predecessors. They were now the new lords of several manors in England's principal maritime county during the second half of the 17th century, at exactly the time that widespread deforestation caused by ship building for the Civil and Dutch wars was becoming apparent. Evelyn's *Sylvarum* was commissioned by the Admiralty specifically to address that deforestation, and the Mallock family were exactly the sort of people who would have read it.

³⁶ Rakoczy, *op cit*

³⁷ Belk, 1984

³⁸ cf. Stevenson, 2006 on the temporary architecture of Stuart processions.

The contents of the Mallock's library at that time are unknown, but the salvaged floor structure at Cockington Court is reasonable evidence of the spread and influence of the writings of Evelyn, a change in the sensibilities of the new land-owning class in the second half of the 17th century and, possibly, the conservative expectations of their predecessors and public audience.

Whitestaunton Manor, Somerset

This large medieval manor house is situated in the Blackdown Hills on the Devon/Somerset border near to the formerly monastic Jacobean house of Forde Abbey. It is one of Somerset's larger historic houses but, with the exception of the relatively recent studies of Penoyre *et al*³⁹, it has received little historical analysis, probably because most of the estate accounts were destroyed in a solicitors' office during a WWII air raid on Bath⁴⁰ and because the last owners have refused access to the remainder, which is ironic given that its owners in the mid 19th century were enthusiastic antiquarians who exposed the Roman bath house that now adorns its 18th century grotto-esque 'water garden' and established a public museum in the grounds. For most of the Middle Ages the manor was held jointly by two branches of a single family – Hugyn and Brett. The Hugyns have remained historically anonymous, but the recusant Brett family had assumed modest political influence and wealth by the early 17th century, but their line failed and they lost their political influence - and many of their estates - during the Civil War and through their continued Catholicism⁴¹. The last male owner, Robert Brett (d. 1666), was a Jesuit known as the 'papist in arms', who built an oratory over the porch.

The manor was sold in 1718 to Sir Abraham Elton, a Bristol merchant created First Baronet Elton for his services to the Prince of Orange and the House of Hanover and - if the names Abraham, Jacob and Isaac littered through the family's genealogy are anything to go by - probably one of the Jewish families re-admitted under Cromwell's protectorate, or a Non-Conformist. Like the Mallocks of Cockington Court and the Protestant landlords of Ireland, the Eltons were newly arrived on the manorial house

³⁹ Penoyre, 1994 and 2005; Somerset Vernacular Building Research Group, 1996; and the Victoria County History, 1978. It was also the subject of a *Time Team* programme.

⁴⁰ The research notes of the Victoria County History are held at Somerset Records Office under the catalogue reference DD/X/CRR 1 S/2482

⁴¹ VCH, 1978, pp232-233

scene and evidently had a great deal to prove. Basing themselves at Clevedon, they proved to be prodigious builders and generous patrons of the arts, private and public, during the 18th and 19th century, commissioning and designing many of the civic facilities of western Bristol and entertaining many of the principal artistic figures of the late 19th century, including members of the *Arts and Crafts Guild* such as the architect and garden designer John Dando Sedding (1838 – 1891) and writers such as Tennyson. Sedding worked at Whitestaunton Manor at least once, in 1875, installing 'faux Tudor' windows and new door openings in the stables and re-arranging the 18th century 'water garden' to make optimum use of the Roman ruins⁴² and it is almost certain that he also worked in and on the house itself (Figure 9). The Eltons held the manor and the advowson of the church until 1925, whence they sold it to a Lt. Col. Percy Reynolds-Mitchell who made “*many changes*” to the interior of the house⁴³.

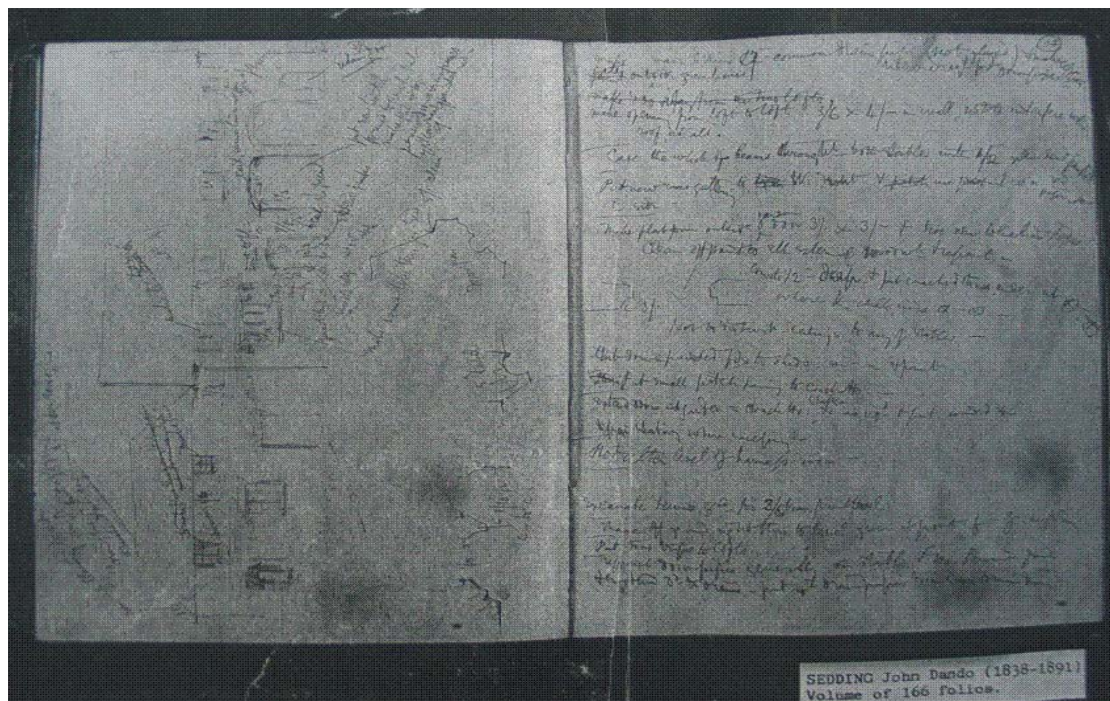


Figure 9. John Dando Sedding's notebook covering 1875. The left page is an elevational drawing of the stables at Whitestaunton annotated with instructions for replacing the original windows with medieval forms

The layout of the house has proved unresponsive to plan-form analysis, with neither archaeologists nor architectural historians being able to identify a convincing chronological development conforming to received models. The author's detailed

⁴² RIBA archive reference VOS/251 and 252

⁴³ *Ibid.* Anecdotal evidence collated by the VCH, but not used in the published history, attests to extensive refurbishment of Whitestaunton Manor.

analysis of the interiors during c. seven years structural refurbishments revealed that much of that decorative fabric was installed in the house during the early 20th century on a structural palimpsest of serially re-built medieval and later masonry and, probably, at least one wall of Roman date.⁴⁴ The building has been comprehensively and substantially reconfigured throughout its post-medieval life, much of it with salvaged material and entire architectural elements exactly along the lines identified in Italy and France by Bernard *et al*⁴⁵.



Figure 10. The 'good 17th C stair' at Whitesatunton under investigation

Partial dismantling of the "*good 17th C stair*" (Figure 10) proved it to be neither good, structurally, nor 17th century in date. It is – or rather, was – a curious Esher-esque structure of four principal flights set within a square turret appended to the rear of the medieval north range. Archaeological analysis of its fabric demonstrated it to have been reconfigured using salvaged components, first, in the 18th century and then again in the early 20th century. Given the Elton's wealth and the importance of staircases to 18th century houses, it is extraordinary that they should have preferred

⁴⁴ Heaton, 2012.

⁴⁵ Bernard *et al*, *op cit*

reconfiguration of Elizabethan and Jacobean fabric to installation of a new staircase of contemporary design. This is 18th century *spolia* in the Classical sense and suggests the Eltons retained the historic fabric for social and political display.



Figure 11. One of the 'Jacobean' friezes on its sawn softwood and expanded steel mesh substrate.

The plaster friezes are, admittedly, examples of the crudest use of salvage, along the lines documented by Harris⁴⁶, but are nonetheless of methodological significance. That of the Frieze Room, described in the definitive study of decorative plasterwork in Somerset⁴⁷ as “*the most startlingly original frieze in Somerset*” and “*a unique example*” ascribed a date of AD1630 on the basis of its association with an armorial device, is an agglomeration of differently prepared and differentially aged components, held together by a variety of joints, glues and fixings and attached to the walls by a substrate of mechanically-sawn softwood battens and expanded metal lath (Figure 11). This, together with the associated wall panelling was almost certainly installed under Reynold-Mitchell's tenure, and illustrates the archaeological complexity of such decorative fabric and the extent to which the historical integrity of

⁴⁶ Harris, 2007

⁴⁷ Penoyre, 1998, p 26. .

such buildings has been compromised and hidden by 20th century use of salvaged materials. Two other instances of salvage, however, are potentially of wider historical significance: the coffered ceilings and the external east wall of the 'services' range.



Figure 12. Salvaged coffered ceiling

Removal of 20th century partitions and ceilings revealed two hitherto unknown coffered ceilings of identical mid 16th century form over separate first floor rooms. The larger and more complete was situated over one of the rear bedrooms in the west range and appears to be a primary *in situ* component of the Elizabethan⁴⁸ extensions, but the smaller of the two (Figure 12) is not. Situated within a short passage over the Elizabethan dais window between the west and east ranges, it had been cut-down asymmetrically and fitted *post hoc* into the small space.

Fabric and typological analyses of associated structures suggests the salvaged ceiling structure had been installed sometime in the late 16th or early 17th century, i.e. a prime candidate for monastic salvage, probably from Forde Abbey. By that time, the house was owned solely by the Brett family whose members – male and female –

⁴⁸ The date of these extensions are not known with any certainty, mainly because of the lack of historical records and the widespread use of salvaged material within them.

were later frequenting the "crypto-catholic" circles of Henry Howard of Northampton⁴⁹ and two at least - Anne Brett and her brother-in-law Sir Robert Brett – were fully fledged recusants. We have no idea how much time they spent at Whitestaunton, but their coat of arms is displayed in three places, so it would be reasonable to assume they were at least regular visitors. In any event, they would not have allowed tenants to indulge tastes and allegiances they did not themselves approve of. There is no reason to believe they couldn't afford a bespoke ceiling to go with their new dais window. Assuming it did come from Forde Abbey, their acquisition and use of it expressed architecturally their cultural and religious leanings and demonstrates that the 'trade' in salvage moved across and up the social and economic hierarchies of the time.



Figure 13. East range of Whitestaunton Manor. The Junction with the medieval core is arrowed.

The external elevation of the east 'services' range (Figure 13) demonstrates a more creative use of salvage. The range is an addition to the medieval building, present by 1840 and ascribed a 16th century date by the *Victoria County History* and an 18th century date by the Somerset Vernacular Buildings Research Group⁵⁰. Its mono-

⁴⁹ Thrush and Ferris, 2010

⁵⁰ Penoyre, 1996

pitch roof is built principally of salvaged timber and the single traceried window frame in its north gable serves a blind opening, whilst the internal faux medieval door openings connecting it with the medieval core of the building contain brick in the natural arches formed over their lintels, so the 18th century date is the more likely of the two.



Figure 14. East elevation of the east range showing 'relic' architectural details.

The hitherto rendered outer face of the east wall contains fragments of a large number of superficially medieval window and door openings (Figure 14), together with window frames of brightly coloured Ham stone. The latter were almost certainly installed under Sedding's direction, but the authorship of the incomplete details is not known. Nonetheless, they were installed during the Elton's tenure. None were carried through to the inner skin; none related to present or past layouts; and at least one of them – one side of an ostensibly narrowed door opening – could not have functioned, so they are and were non-functional and are not decorative in the aesthetic sense. In that respect they are directly comparable to the salvaged details employed at Netherhams Farm and the documented 'deception' at Parham Court⁵¹. The author has observed similar in the 18th century Monastery Garden walls at

⁵¹ Kirk, *op cit*

Edington in Wiltshire⁵², and throughout the former monastic ruins at Abbotsbury and Cerne Abbas in Dorset, the latter renamed 'Beauvoir' and augmented with three viewing mounds - or 'Pleasaunces' - by the 18th century⁵³.

In those cases, architectural masonry salvaged from earlier medieval and baroque buildings on those sites was incorporated within the publicly visible elevations of later – 18th century – structures, but in a random manner. At Whitestaunton, it is a convincing replication of the redundant features of an archaeologically complex building. This, like Netherhams Farm, is *spolia* in the Classical sense, employed creatively and symbolically in the same manner as in 17th century Ireland⁵⁴. It also whiffs of the Gothic(k) and in that regard has been applied with an almost scholarly attention to archaeological detail. It is comparable to Italian and French use, informed by an Antiquarian's appreciation of historic buildings as archaeological entities and, like Netherhams Farm, apparently associated with a grotto-esque 'Paradise' water garden.

The Elton's use of *spolia* in their extension of Whitestaunton Manor might simply have been an act of architectural whimsy, reflecting the familiarity with the writings and practices of the Renaissance architects and pronouncers of the Gothic(k) movement by a family who could not, or would not, realise them in full. That in itself is interesting. It is equally likely, that they had an additional motive. The Eltons shared, with Lord Stawell at Netherham and the Mallocks at Cockington, a social insecurity as new lords of the manor and, perhaps, religious insecurity as former Jews or Non-Conformists. Both families assumed ownership of their estates at times of political and religious turbulence at the end of the 17th and the start of the 18th century, when misplaced loyalties lead to sequestration, or worse. Their incorporation of faux archaeological details in the wall, lent the house a greater and more complex air of antiquity than it already had and demonstrated their respectful stewardship of their recent acquisition. This is directly comparable to Classical use of *spolia* and analogous to the neurotic fancies of Strawberry Hill etc. That most of the people passing through the stables courtyard would have been servants and tenants, is also relevant. The wall of the east range became a sort of historical tableau that leant their

⁵² Cf Heaton, 2009. Edington Priory in Wiltshire and its adjoining Monastery Garden were created by the de Paulet family in the late 17th century from the ruins of a Bonshommes monastery. The garden walls incorporate large numbers of spoliated details.

⁵³ RCHME, 1952, pp74-85

⁵⁴ Moss, *op cit*

ascendancy an air of pageant, designed for consumption by the classes most likely to resent their arrival. They and their successors continued in the same vein throughout the 19th and early 20th centuries.

A major church

Christchurch Priory is an architecturally, archaeologically and structurally complex former monastic church that retains an exceptional set of fabric records detailing maintenance and repair works since the 17th century⁵⁵. It is architecturally notable for the Renaissance motifs of its epi-Reformation chantries and for displaying Saxon, Norman, Early English, Decorated and Perpendicular styles. It also displays more 'unfinished' details than perhaps any other church of its size and importance.

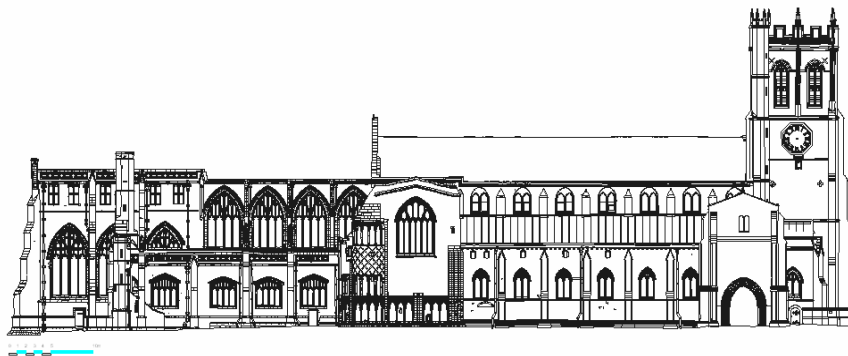


Figure 15. Christchurch Priory, north elevation

It is structurally notable in having no foundations to its flying buttresses⁵⁶, an historical happenstance that contradicts received history of architecture as an inherently empirical development⁵⁷. Beech has made a similar observation with respect to hammer beam roofs⁵⁸: designers and builders, certainly medieval builders,

⁵⁵ The churchwardens' accounts are examined in Herbert Druitt's serialised *Christchurch Miscellany* of 1919-1932; the other fabric records were examined and catalogued by the present author between 2003 and 2010 for the Priory's Conservation Management Plan (Heaton, 2010).

⁵⁶ Heaton, 2009

⁵⁷ cf. Heyman, 1995.

⁵⁸ Beech, 2014

did not necessarily understand the function of the structures they were assembling or adapting. This applies as much to bespoke structures as it did to salvaged ones.



Figure 16. North end of the pulpitum, cut into the crossing piers

In common with most other urban monasteries⁵⁹, Henry VIII's Commissioners granted the Priory church to the people of Christchurch, to be managed by a committee of feofees, and its former cloisters to a succession of private landowners that eventually included one Gustavus Brander (1720 – 1787) – Governor of the

⁵⁹ The term 'monastery' is used to refer to monasteries, priories, nunneries/convents, minsters and abbeys.

Bank of England and published antiquarian⁶⁰. The Churchwardens' Accounts indicate a great deal of repair work during the 18th century, including the replacement of the Nave roof structure in c. 1706 and the replication of much of the decorative detail throughout the 19th century⁶¹. Of the many unexplained conundra⁶² in the layout and fabric of this important building, this study is concerned primarily with two: the Pulpitum and the Nave roof.

The pulpitum between the nave and the quire is one of the more arresting sights within the interior of the church (Figure 16). This enormous structure – essentially a three-dimensional screen with an internal stair and passage standing two storeys high – forms a wall at the east end of the nave, separating it from the quire and chancel. It hides the lower half of the quire reredos – the Jesse Screen – from the nave, but until 1830, when the organ donated by Gustavus Brander was moved from the top of the pulpitum to the south transept, it hid the entirety of the quire reredos from public view. Extensive – ostensibly 16th century – damage was comprehensively repaired by Benjamin Ferry in the early 1860s, but even his robust Victorian approach failed – or declined – to mask a glaring anomaly: it doesn't fit the church. The pulpitum is wedged asymmetrically between the two piers on the east side of the crossing, both of which have been brutally chopped to accommodate it. It cuts into the southwest quarter of the northern pier and overlaps the whole western face of the southern pier.

It was in place in 1787⁶³, but neither its source nor exact date of arrival are recorded historically⁶⁴. However, its ecclesiological function might provide the answer to both. Notwithstanding their size, pulpitums are specific to monastic and cathedral churches⁶⁵. It must therefore have come from another monastery, before or at the Dissolution, or from a cathedral church at any time prior to 1787. Most of the geographically proximate monasteries have been lost and there is no evidence for a pulpitum in nearby and stylistically similar Romsey Abbey⁶⁶; but the cathedral churches were in an almost constant state of refurbishment throughout the 17th – 19th

⁶⁰ Brander, 1786

⁶¹ Schillig's MSc dissertation (2001) on the conservation history of the Nave arcade capitals demonstrates this conclusively.

⁶² Cf Polk, 1994

⁶³ Drawing held by the Society of Antiquaries, dated 1787.

⁶⁴ Druitt (1919-1932) does not mention it.

⁶⁵ Cross and Livingstone, 1997

⁶⁶ Hearn, 1975.

centuries, with pulpitums and other elements being re-located and, or replaced⁶⁷, and most are well-documented. Those refurbishments were initially liturgical, later partly aesthetic. Whatever the motives at the donor church, at Christchurch the installation of a monumental screen between quire/chancel and nave conformed to 17th century practice " *based on the Anglican post-Reformation model of a two-cell building, one for hearing the service....and the other for...the celebration of the Holy Communion.*"⁶⁸. It is likely, therefore, that the pulpitum was installed at Christchurch in the 17th century to subdivide the principal space into two, also thereby distinguishing Christchurch Priory from Romsey Abbey.

A likely source is Winchester Cathedral, from where a stone pulpitum was removed during Inigo Jones' minor re-ordering in 1638 in which he replaced the masonry pulpitum with a timber screen⁶⁹, itself subsequently removed. Lindley *et al* present compelling evidence for the removed pulpitum having been of masonry and of 'Perpendicular' style⁷⁰. Though lacking much of its decorative detail, the Christchurch pulpitum is stylistically Perpendicular, similar to the early 16th century choir stalls that adjoin it⁷¹, and metrically compatible with the nave width of Winchester Cathedral. It would have fitted and matched Winchester. Irrespective of whether that provenance is correct, movement of the pulpitum from anywhere to Christchurch would have been an immense and highly public undertaking, possibly involving mechanical assistance of the sort developed by Fontana at Rome in the preceding century. It therefore hints at a technological capability hitherto unrecognised for Britain, possibly involving Inigo Jones. That, surely, is intriguing.

Assuming Winchester was the donor building, the act of salvage and re-location was also an architectural and public manifestation of the relationship of the two churches. Prior to the Dissolution, Christchurch Priory was situated within Winchester Diocese, but not hierarchically or financially related to it. That changed in the 16th century, with the former priory church becoming subservient to the Cathedral and, eventually, supporting the Diocese financially through its precept payments. Materials were therefore moving down the hierarchy, whilst money flowed up. There is a hint of

⁶⁷ cf. Gough, 1979

⁶⁸ Jacob, 2011.

⁶⁹ Lindley, Brodrick and Darrah, 1989.

⁷⁰ *ibid*

⁷¹ The Priory Architect – Michael Wright - reported in 1939 after inspecting the underside of the stalls that they appeared to have been re-assembled, i.e. salvaged and re-located to Christchurch. Priory Archives # 88P148

trade here. It is also redolent of the culture of exchange inferred above from the archaeological evidence of excavated monasteries. That the exchange was not recorded by either church suggests it was customary; that it was expected.

It also suggests, perhaps, that the iconoclastic Puritanism of the early 17th century was held less fervently – at least at Christchurch. Embellishment of a former monastic church in the early-mid 17th century with decorative structural fabric appears to run counter to the Puritanism of the time and, indeed, the indigenous anti-catholic sentiment postulated by Masington *et al* on the evidence of late 16th – early 17th century Yorkshire. Indeed, it suggests that the populace at large embraced, or resumed, the old-fashioned tendencies of Charles I confidently, on the eve of the Civil War. Had their intent been simply to reduce the floor area of the church or separate *Word* from *Sacrament*, a timber or plaster screen would have been quicker and cheaper⁷²: Demolition of the entire east end of the church – as at Bath and Malmesbury - would have served the same purpose and turned a profit in an area lacking freestone. The parishioners of Christchurch took a more conservative path.

This is 'iconic re-use' as identified by Stocker and Everson in East Anglia and Ousterhout at Jerusalem⁷³, on a monumental scale. It is *spolia* in the Classical sense and on a scale comparable to late Imperial Rome or Renaissance Europe. The immense effort involved in moving and installing this monumental structure demonstrates, surely, that the pulpitum was acquitted for at least its associational value, if not an iconic significance. Notwithstanding the religious allusions, it also demonstrates that the salvage industry identified by Rakoczy for the later 17th century and inferred by Colvin *et al* for the 16th century, was very much alive in the early 17th century on the eve of the Civil War. The Christchurch pulpitum demonstrates that, whilst the Civil War certainly benefited the wreckers of Pontefract Castle, it didn't spawn them.

The nave roof structure covers half the building's length. It is extensively repaired with plain 'A' frame softwood trusses and ironwork of 18th century form⁷⁴, but its historic core is of arch-braced crown-post form with a single moulded purlin per pitch, decorated with painted floral designs on the arches and cusped wind braces and built

⁷² Lath and plaster partitions and blockings were installed elsewhere in the church in the 17th and 18th centuries.

⁷³ Stocker and Everson, *op cit*, Ousterhout, 2003.

⁷⁴ The date 1769 is carved into one of the replacement trusses. .

of oak (Figure 17). The crown post form is a century younger than the 13th century date ascribed the clerestory on which it rests⁷⁵, and few comparable examples have moulded purlins or purlins laid in the plane of the roof, as is the case here. The purlins are of 15th or 16th century form and would not be out of place in the roof of Whitestaunton Manor, for example, or for that matter, over the Perpendicular Lady Chapel and quire. Furthermore, the painted and carved decoration would have been wholly superfluous at this height within a vaulted roof space⁷⁶: the capitals of the clerestory pilasters clearly indicate that the nave was vaulted – or was intended to be vaulted.



Figure 17. Nave roof structure, showing scarf joints (arrowed)

Nonetheless, the basic form of the roof is of less importance here than its evident history of dismantling and re-assembly. Most of the common rafters have empty tenon sockets for collars approximately 350mm below the existing collars, the levels of which vary by c. 200mm along the axis of the roof; and all the principal rafters and commons are scarf-jointed immediately above the purlin – i.e. they have all been

⁷⁵ Walker (2011) suggests a late 13th century date for the adoption of Crown Post roofs in most of England, whilst Roberts in the same publication suggests a date range of c. AD1300 – AD1450 for Hampshire and adjoining counties. Hewett suggests a late 13th century date for this type of structure.

⁷⁶ The present vaulting is an early 19th century lath and plaster replacement, springing from capitals designed to take a masonry vault.

shortened by the same amount, or at least dismantled prior to assembly here (Figure 17)⁷⁷.

The author is not aware of any roof structure of this size with scarf-jointed principal rafters. The most striking anomaly, however, is that the principal rafters – i.e. the trusses – are not positioned over the mural corbels that project from the face of the clerestory wall, nor, indeed, are there any arch-braces extending down to them from the trusses. The corbels are redundant (Figure 18).



Figure 18. Nave roof structure, showing un-used corbels (arrowed)

Unless the roof structure was designed and assembled with an incompetence uncharacteristic of medieval carpenters, it is hard to avoid the conclusion that it was not designed for Christchurch Priory – or at least the nave - but was adapted to fit and possibly augmented with purlins. The churchwardens' accounts ⁷⁸ suggest that the roof was substantially rebuilt or replaced following the 'Great Gale' of 1706⁷⁹, but there are no verifiable sources to support this. Equally likely is the possibility that it

⁷⁷ The author is not aware of any comparable roof structure in which all the rafters – common and principal – are scarfed in this way.

⁷⁸ Cf. Emmett, 1865. This is one of many self-published or un-published histories of the Priory church.

⁷⁹ Cf Druitt, 1921. There was another 'great gale' in 1866.

was moved from the east half of the church to the nave after re-configuration of the Lady Chapel and the quire shortly before the Reformation⁸⁰, granting to the 'lay' end of the church some of the sacerdotal qualities of the east end. In either case, archaeological analysis of the structure demonstrates it has been modified, probably to fit the span of the nave⁸¹, so it is not unreasonable to conclude that it is salvaged, possibly in the early 18th century.

Assuming it came from elsewhere, the source building had to be of similar or larger span. Despite the domestic appearance of the decorative detailing, a manorial building or large church are the most likely. It is not feasible, for a study of this kind, to investigate every possible secular building, especially as many of them no longer survive, but two commensurate churches are likely candidates: Romsey Abbey and, once again, Winchester Cathedral, both of which are situated on rivers large enough to have embarked structural timbers to Christchurch. Romsey is the closer of the two, geographically and ecclesiologically, and is also similar in size to Christchurch Priory. Though none of its medieval roofs have survived, with the possible exception of the late 16th century roof of the nave aisles, only the south transept roof is known to have been replaced in the 18th century, the rest being primarily of 19th century date⁸². However, the nature of the roofs replaced at that time are not known. Nonetheless, the south transept is not large enough to have furnished the timber for Christchurch, so it is unlikely that Romsey was the source.

Winchester Cathedral is much longer, with a nave almost three times longer than that of Christchurch Priory, but of similar span. Its roofs were extensively repaired and rebuilt throughout the Middle Ages and the 19th century, but there was also a major campaign of structural refurbishment of the nave roof in 1694 or 1699⁸³ that included wholesale replacement of its western half. The 19th century work has made the remaining roof structure difficult to understand archaeologically, and none of the surviving medieval roofs are identical to that at Christchurch, but the wholesale replacement of the roof of the west nave at the very end of the 17th century would

⁸⁰ The date of the second floor over the Lady Chapel - St Michael's Loft – is not known, but it is stylistically late Perpendicular and almost secular domestic. It was in use as a school by the second half of the 16th century.

⁸¹ See below: The east elevation of the Tower retains a set of faux eaves scars intended, presumably, to draw to the attention of the viewer the possibility that the nave might have been re-roofed.

⁸² I am grateful to Dr Francis Green, former Abbey Archaeologist, for his summary of his unpublished analysis of the roofs

⁸³ Munby and Fletcher, 1983; Hewett, 1980, p246 states AD1699 for the replacement of the west nave roof

have been broadly contemporaneous with the re-roofing of Christchurch, and would have furnished a structure long and wide enough to cover the whole of the nave of the Priory church. It is not impossible, therefore, that the nave roof structure of Christchurch Priory, like its pulpitum, came from Winchester Cathedral.

If that interpretation is correct, the two structures - pulpitum and roof - demonstrate a pattern of patronage running in parallel with the ecclesiological hierarchy.

Winchester replaced its structures in wholly new materials; Christchurch received its hand-me-downs. That neither transaction is recorded in writing, as far as the author can establish, suggests that it was an informal but well-established practice free of financial or contractual obligations – in other words, a custom.



Figure. 19. East end of the Lady Chapel of Christchurch Priory. The faux Romanesque door is below the centre of the window

It is also possible that this evident and architecturally complex history of salvage is responsible for some of the historically inexplicable details of the building's fabric, or at least 19th century 'restorers' whimsical interpretation of it. One such is the east

face of the tower, where the facing stones replaced by T.E. Jackson c. 1900 incorporate the verge scar of a steeper and taller nave roof structure that was not present when Jackson was working on the building. In that case he might simply have been faithfully re-instating archaeological details under the supervision of his client, Canon Corke-Yarborough – an amateur archaeologist excavating at Romsey Abbey at the time. Jackson is not known to have worked on the east end of the Lady Chapel, where there is a blocked Romanesque 'door opening' below the main east window, hidden by the reredos (Figure 19). The door, however, is wholly fictitious: Notwithstanding the fact that it is hidden behind the reredos, there is no evidence of wear to the reveals, the stone 'blocking' it is identical in type and bedding to that forming the rest of the wall, and it is bisected by the unbroken chamfered table course of the plinth – so it could not have been used.

This is one of a large number of archaeologically inexplicable 'relic' details within the fabric of Christchurch Priory⁸⁴. The date at which this whimsical detail was inserted is not known. It was not included in the early 19th century engravings of Britton or Ferry and is not visible on later 19th and early 20th century photographs, but the sharpness and uniformity of the stonework suggests mid- late 19th century, making Benjamin Ferry the likely culprit. His antiquarianism had informed his 'completion' of the porch vaulting and, probably, several similar 'archaeological' details in the north elevation of the north nave aisle, which was fully refaced by him in 1859. As with Netherhams Farm, Whitestaunton Manor and Parham Court, this major building had become the palimpsest onto which antiquarian architects or the clients etched their own archaeological details, in this case wholly fictitious. In the case of those secular buildings, the practice appears to have been politically motivated: the motives at Christchurch can only have been antiquarian and architectural.

⁸⁴ Cf. Polk, 1994.

A monastic ruin

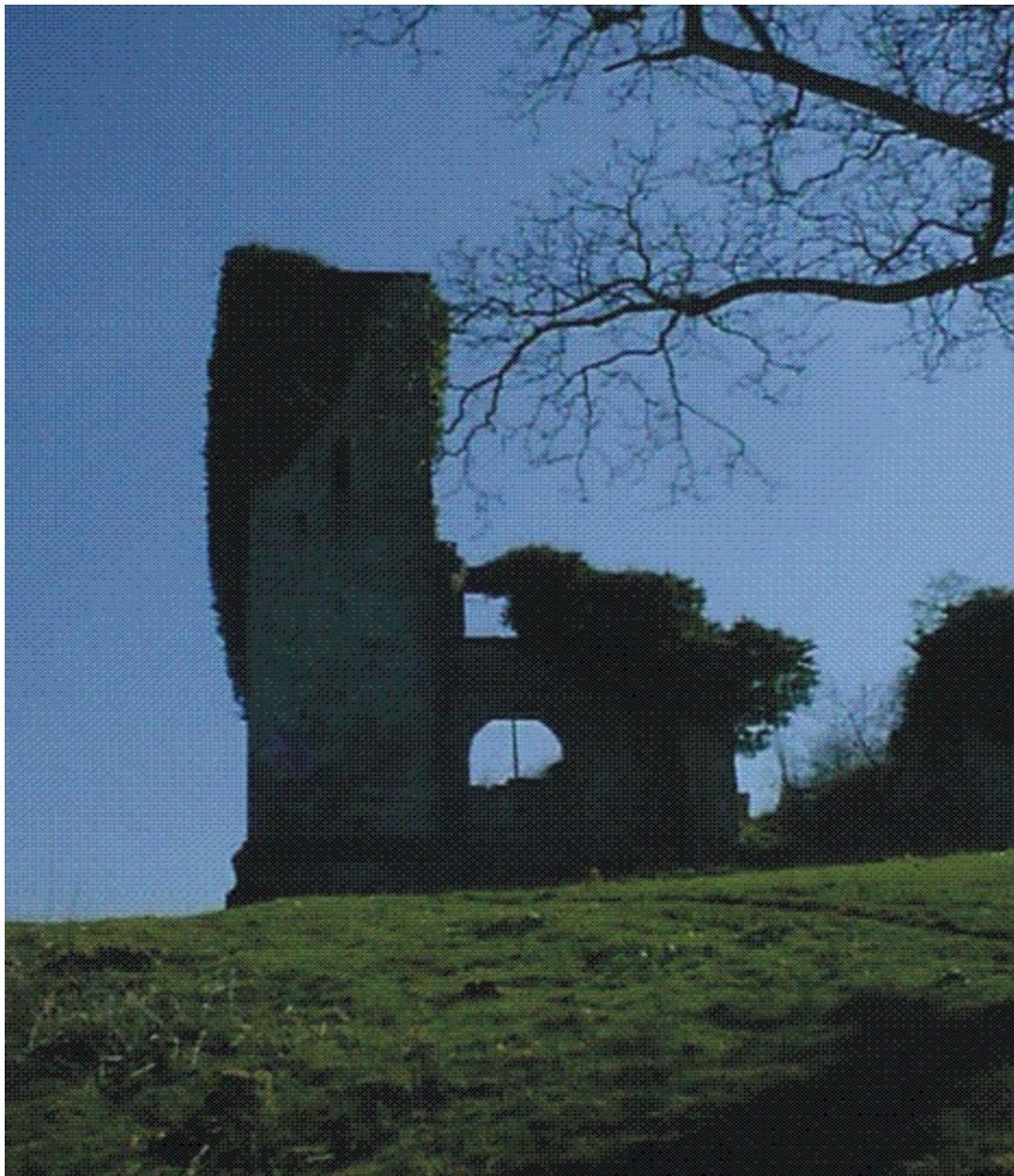


Figure 20. Bradenstoke Priory, Wiltshire, as seen now from the 'Great West Road'

Bradenstoke Priory in Wiltshire exemplifies the use and architectural development of salvage on a grand scale⁸⁵. An Augustinian Priory; at the Dissolution it was purchased by the Long Family of South Wraxall Manor; by AD1542 Leland described

⁸⁵ Hearst's wasting of Bradenstoke Priory led to a re-drafting of the Ancient Monuments Bill of 1931 that, for the first time, allowed the State to intervene in the management of privately owned 'Scheduled Monuments'. It is the subject of a large amount of academic and popular analysis (cf Venning 1998), including television programmes, and is probably the root of the European stereotype of the boorish American plutocrat.

it as already ruinous and by the 17th century only the 'cellars' and 'Priors' Hall' survived to be described by Aubrey in his *Topography of Wiltshire*⁸⁶. The hill-top ruins (Figure 20) became an established part of Wiltshire's historic landscape, the subject of antiquarian attention, romanticised landscape painting, archaeological investigation, early photography, wholesale demolition and a great deal of hand-wringing. It achieved national attention in 1929, when the American millionaire William Randolph Hearst purchased what was left of Bradenstoke Priory with the express intention of quarrying it for architectural details to augment St Donats in Glamorgan, which he and Sir Charles Allom - of the architectural salvage firm Allom & White⁸⁷ - achieved with some distinction.

It has since become the *casus belli* of building conservation in Britain. But was the building Hearst had demolished part of a medieval priory? At least one young architect, surveying the monastic remains of Somerset and Wiltshire in 1897, found some of the details perplexing, even if he dismissed his own doubts: William Haywood, in describing the structure, identified what he described as "*modern barrel vaults*" in the northern undercoft, but crossed-out that term before reading his account to the RIBA. He also observed that the "*blocked up doorway flush with the wall*" at the north end, shown by 18th and 19th century antiquarian views, was "*not apparent*"⁸⁸.

During nearly four centuries of private ownership prior to Hearst's it had passed through many hands, including those of some notable builders⁸⁹. It was owned and garrisoned during the Civil War⁹⁰ by the regicide Sir John Danvers (1588-1655), who constructed artillery defences that later formed the kernel of a formally-designed landscape garden with the priory ruins at its dramatic northern edge⁹¹. Danvers was a cultured man and "*professed papist*"⁹², who had travelled throughout France and Italy before the war and accumulated crippling debts through his extravagant tastes in architecture and gardening⁹³. Aubrey tells us that that "*Twas Sir John*

⁸⁶ Jackson (Ed), 1862.

⁸⁷ Harris (2007), presents a potted history of Allom and White.

⁸⁸ Haywood, 1897 in RIBA archives

⁸⁹ Succinct accounts of a complex history of ownership and tenure are given in Pugh, 1957 and RCHME, 1998

⁹⁰ Hobbs, 2003

⁹¹ Creighton, 2000

⁹² Lee, 1900

⁹³ Kelsey, 2004

Danvers....who first taught us the way of Italian gardens. He was the epitome of Brown's Military Gardeners of the mid 17th century ⁹⁴. Furthermore, his father was one of Inigo Jones' clients for his trip to Rome c. 1613 acquiring architectural prints⁹⁵. Aubrey, writing in 1667, mentions that Viscount Purbeck- a Villiers (later Dukes of Buckingham) and the son-in-law of John Danvers – had offered to give him a “*view*” – i.e. a drawing - of the priory ruins for his proposed history of North Wiltshire, but it was not forthcoming, or at least has not survived ⁹⁶. Nonetheless, the offer suggests Danvers had had something to show-off.

The estate passed to the second Earl Abingdon (d. 1743) and by 1732 the remains of the Priors' Hall and adjoining buildings were occupied by a Germanicus Sheppard, to whom the Buck Brothers dedicated their engraving of that date (Figure 21).

Sheppard is historically ambiguous, but tertiary sources at Devizes Museum describe him as a “*colourful character...a devout Catholic....who died after a fall from his horse in 1758.*”⁹⁷ At an unknown date, possibly 1758 but certainly by 1772, the estate had become incorporated in the expanding holdings of the Methuen family of Corsham Court who retained it till 1863. In addition to their economic power, the 17th and 18th century generations of the Methuens were diplomats to Spain, Italy and Portugal, amateur architects and acquisitive patrons of the arts and, probably, Catholics: Sir Paul Methuen (c. 1672 – 1757), the second to bear the title and the first to embrace architecture as an activity, attended a Jesuit school in Paris⁹⁸.

The recent history of the site commences with the sale, in 1863, of the estate to Sir Gabriel Goldney Bt. of Chippenham. Like the Methuens, the Goldneys were a long established merchant family with a growing portfolio of property and investments, significant provincial politicians and, in the form of Sir Gabriel, amateur antiquarians and architects. Goldney remodelled some of the buildings (see below) before repeatedly failing to sell the estate. His son, Sir Prior Goldney Bt⁹⁹, succeeded at his third attempt, in 1917. Francis, Baron de Tuyl, a scion of a major Dutch family, bought the estate for £15,500 in 1917 with the intention of converting the surviving buildings into a luxurious country house, and engaged Sir Harold Brakspear FSA as

⁹⁴ Brown, 1999, p 86.

⁹⁵ Mowl and Earnshaw, 1995.

⁹⁶ Britton, 1847.

⁹⁷ Devizes Museum, Bradenstoke Heritage Collection.

⁹⁸ Schweizer, 2004

⁹⁹ He was named after the priory

architect, possibly because Brakspear was already working at the site in his other capacity of archaeologist. The costs received in June 1919 – half the purchase price – outweighed the value of the site, which was back on the market by September of that year. It passed through three more owners – J.A.A Wright, H. Lushington-Storey and eventually an H.W. Fry before coming to the attention of William Randolph Hearst, ironically through the promotional efforts of the *SPAB*. The rest is received conservation history.

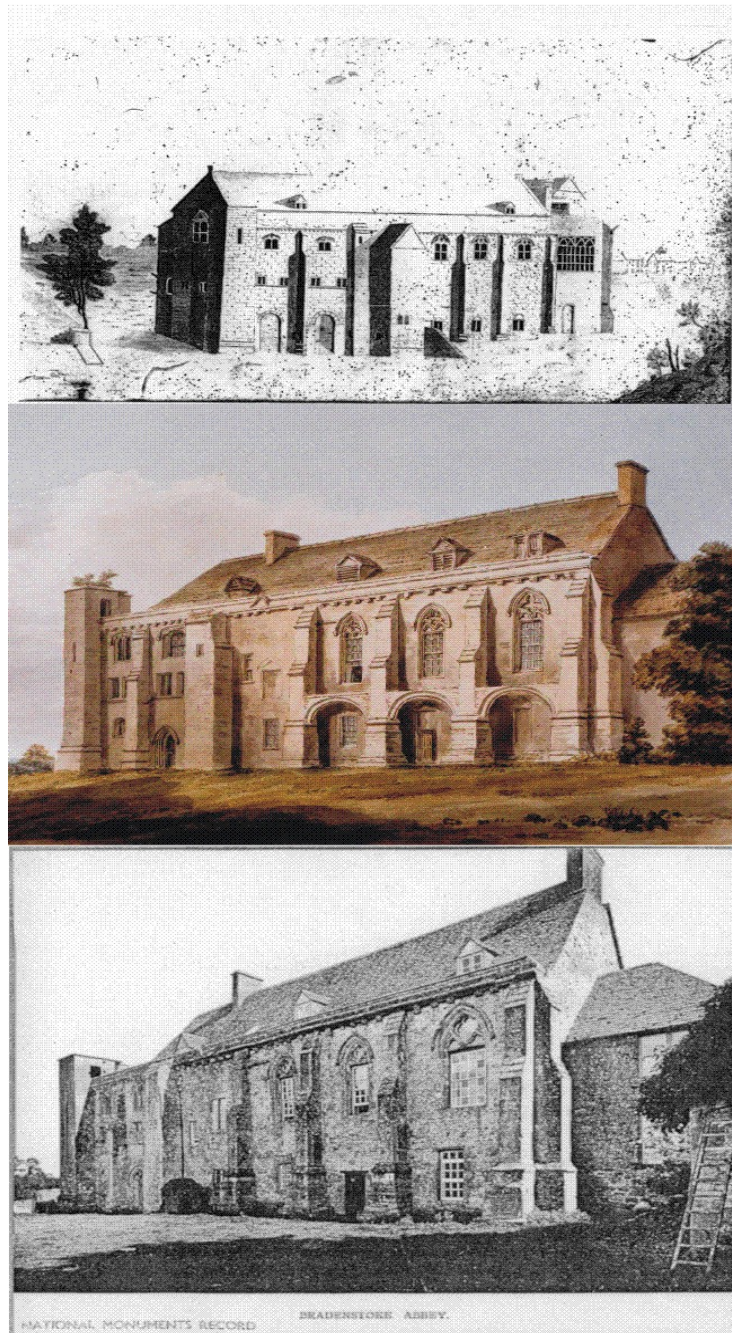


Figure 21. The west elevation of the Priors' Hall in 1732, 1808 and 1919

Archaeological and historical analysis of the surviving fabric of the Priors' Hall suggests there is reason to suspect that some, if not all of those owners, left their mark. Simple comparison of the many antiquarian views of the west elevation (Figure 21) reveal it to be of at least two principal phases of construction distinguished by the fenestration, that have been subject to at least two stages of structural embellishment and restoration initiated before 1808. Most of that was demolished by Hearst, but the surviving fabric incorporates many details inconsistent – if not incompatible – with medieval construction.

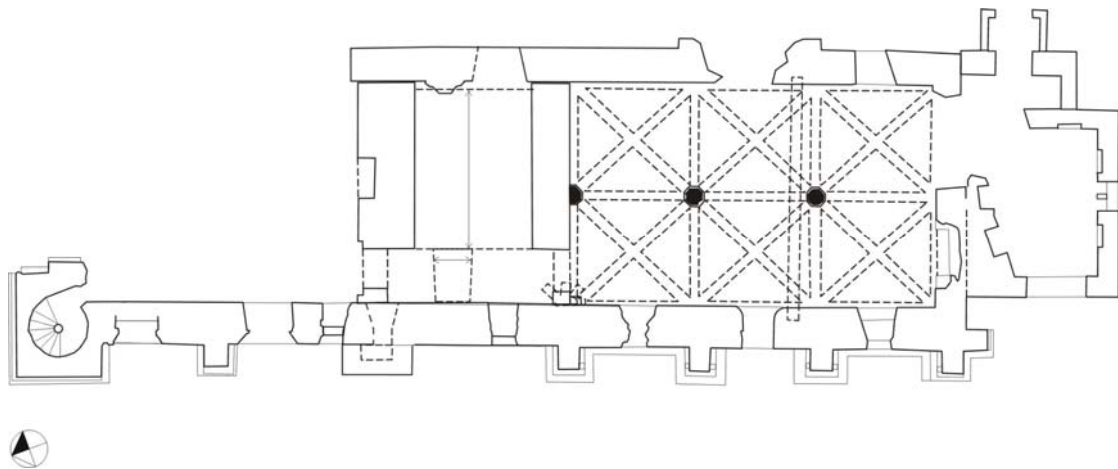


Figure 22. Plan of the Priors' Hall as it survives today. The tower is at the left hand end; the medieval vaulting is shown with groins: the barrel vault abuts it from the left with brickwork 'flying' buttresses extending from its west end.

It survives as a pair of vaulted undercrofts set into a west-facing slope behind fragmentary elevations that extend north beyond the ends of the vaults to meet with a square tower (Figure 22). The most obvious anomaly is the tower and adjoining ground floor elevation. Present in 1732 but architecturally distinct from the rest of the building in being decidedly Italianate, the tower is unparalleled in a medieval British monastery and positioned for maximum skyline profile, but was not referred to by Aubrey¹⁰⁰. The adjoining 'broken' wall stubs (Figure 23. 'A') are in fact fully closed primary masonry (i.e. built like that) and its winder stair has no ground floor flight or, indeed, any access openings at floor levels.

¹⁰⁰ Britton, *op cit*



Figure 23. The rear elevation of the tower

The linking elevation contains a blocked 'door', the inner reveals of which do not extend much below the arch springing (Figure 23, arrowed detail), whilst the keystone is shaped to engage with ashlar masonry from below – i.e it was designed to be blocked, and there is a functionless verge moulding on the south face of the tower (Figure 23, 'B'). Pre-1929 drawings and photographs (Figure 21) show two

blocked doors here and a congested over-abundance of windows, the surviving examples of which incorporate protruding sloped sills, unknown in British medieval buildings. There is no evidence for any form of floor structure in the surviving expanses of 'inner' wall face and all historical views show the wall's parapet coping running into the uppermost door of the tower.



Figure 24. One of the the internal 'flying buttress'. This has collapsed subsequent to the author's inspection in 2003.

The vaulted undercroft is equally perplexing. The vaulting of the southern two-thirds of the undercroft is probably medieval, but that in the northern third is very strange indeed. It consists of an incomplete barrel vault incorporating a lot of re-used architectural stone positioned for maximum visual effect, and is buttressed at its west end by three narrow, arched 'flying buttress' of unfinished brickwork (Figure 24) of thin hand-made stock bricks laid in a sand/lime mortar, compatible with late 17th or early 18th century construction. The vault does not and did not reach the main west wall, so provided no support for a floor above and would have been structurally suspect, but would have allowed sunlight into what would otherwise have been an unlit cellar. The east end of the vault incorporates a salvaged pilaster of similar profile to the columns of the medieval vaulting next door, but is not matched in the opposing west wall and is the only one in the building - the ends of the medieval vaulting being carried on mural corbels.



Figure 25. Loose chamfers on buttress plinths of the 'medieval' vaulted undercroft

Other details include loose chamfers on many of the external buttresses, i.e. wedges of stone mortared onto the buttress offsets (Figure 25) contrary to normal medieval masonry construction; structural notches cut into the uppermost chamfers of the

southern four buttresses (Figure 26) that correspond exactly with the arcade shown by Buckler in 1808 (Figure 21); and a range of small buildings at the southern end that incorporate pairs of Romanesque 'eyebrow' window openings – stylistically 300 years older than the rest of the Priory.



Figure 26. Notches in the buttress tables, proving the reliability of Buckler's painting

Comparison of Aubrey's description of 1667, the Buck Brother's drawing of 1732, Buckler's painting of 1808 and Brakspear's drawings of 1917 with archaeological analysis of the surviving fabric suggest that the remains of Bradenstoke Priory had been subject to architectural embellishment using largely salvaged materials between the late 17th century and 1732, then again by 1808, and then 'restored' to something approaching its pre-1808 state by 1917. The tower design is straight out of the late 16th and 17th century northern European treatises on the architecture of Rome; the northernmost vault anticipates the atmosphere of one of Piranesi's 'dungeons'; and the buttresses of the more convincing vaulted undercroft of the southern half were built with un-chamfered plinths contrary to medieval masonry practice.

The fabric that Hearst left behind, therefore, had been added to the medieval structures as a folly prior to 1732 and the ensemble then heavily modified between

1732 and 1808, with both phases using salvaged and new material positioned to evoke a Gothic interpretation of Classical antiquity and the early Renaissance architecture of Italy. By who is not known, but of its many 16th and 17th century owners and tenants, the most likely candidate is Sir John Danvers, whilst the 18th century embellishments correspond with the Methuen's ownership and are probably their earliest dabblings in architecture.

This is salvage developed to fulfil a creative function, with the architects of post-Dissolution Bradenstoke, like the Stalwells of Low Ham and the Eltons of Whitestaunton, using salvaged material to create grotto-like reconstructions of ruins – the follies essential to *I giardini inglesi*. If Danvers was the first to introduce Italian garden design to Britain, this is probably the *giardino inglese*, i.e. the first; whilst his internal flying buttresses are possibly one of the earliest essays in Gothic(k). Goldney certainly modified and extended the building in the 19th century, but it is the earlier work that is the more interesting and it must be attributed to the Danvers and/or the Methuens.

The Methuens' motives appear to be two-fold. They were a relatively new member of the land-owning class, like the Mallocks at Cockington Court and the Eltons of Whitestaunton, but by the mid 18th century when they acquired Bradenstoke and the Smyth-designed Corsham Court, they were well-established diplomats and privy councillors, having become Wiltshire's wealthiest wool-trading family by the early 17th century. They had little to prove but perhaps they had aesthetic impulses that could not be expressed publicly at or with Corsham Court. They were certainly influenced by Mediterranean culture and the first Sir Paul, educated by Jesuits in Paris, was almost certainly a Catholic. Was Bradenstoke the canvas on which he and his successors indulged their catholic tastes ?

Danvers' motives are potentially more complex. He had every reason to feel nervous in Commonwealth England and his predicament was comparable - albeit the reverse - to that of his contemporary fellow land-owners in Ireland¹⁰¹. But, whilst he couldn't erase his name from Charles I's death warrant, he could broadcast his affinity with the cultural and religious affinities of the monarchy to those who understood the allusion, whilst indulging his passion for garden design and Mediterranean

¹⁰¹ Moss, *op cit*

architecture. Unlike his Irish contemporaries, Danvers' intended audience was his peers and betters, not his tenants. It is not surprising that the earliest exponent of *giardini inglesi* and probably the Gothc(k) probably took his inspiration from Italian architectural drawings collected for his father by Inigo Jones.

Their work is the ultimate architectural expression of salvage in its British context: The ruins of a medieval priory augmented with salvaged and replicated architectural details to create a fantastical structure within a garden constructed within Civil War defences, that has been accepted as a *de facto* medieval ruin ever since, except, perhaps, by the arch salvagers themselves – Hearst and Allom. Bradenstoke Priory exemplifies the architectural history of ruins and salvage in Britain and its graphical depiction.

Bradenstoke Priory is extraordinary, but it is by no means unique: Similar structures and embellishments survive at Cerne Abbas and Abbotsbury in Dorset and Edington Priory in Wiltshire. The architects of the embellished monastic ruins and viewing mounds of 'Beauvoir' at Cerne Abbas have remained anonymous¹⁰², but Abbotsbury was acquired by the Strangways family at the Dissolution, later Earls of Ilchester and enthusiastic builders; whilst Edington was part of the de Paulet estate. In addition to re-roofing the longest barn in Britain with a wholly contemporary roof structure during the late 17th or early 18th century, the Strangways built a 'monastic' gate, a subsidiary gate ruin composed of inverted fragments of several different structures, the famous 'pinion end' of the monks refectory with a chamfered plinth on its inside face, a granary with four full height windows and medieval dovecote positioned, like that at Netherham, overlooking the former monastic precincts from the side of a hill. Examination of the material fabric of these, comparison with well-established monastic layouts and – in the case of the dovecote – historic maps and plans demonstrates they cannot be medieval structures. The results are not as visually concentrated or architecturally imaginative as Bradenstoke, but they undoubtedly added to the picturesque qualities of Abbotsbury¹⁰³ and have been accepted as authentic medieval ruins ever since.

¹⁰² RCHME, 1952, pp 74-85

¹⁰³ Heaton and Keevil, 2003, citing all historical sources.

CONCLUSIONS

Received understandings

The received understanding of the historical use of salvaged building materials in Britain is simplistic compared to that of the Classical world, France or even Ireland. There, the studies of scholars such as Alchermes¹, Brenck², Greenhalgh³, Ousterhout⁴, Bernard *et al*⁵ and Moss⁶ have demonstrated the complex milieu of political, cultural, aesthetic, structural and economic imperatives that informed and were served by the re-use of building materials and architectural details. For Britain, authors such as Colvin, Pevsner, Salzmann and Airs⁷, have noted the occurrence of salvage in historical sources and extant buildings, but have attributed it typically to opportunistic or economic imperatives, with only Howard⁸ and Stevenson⁹ alluding to more complex purposes. Was Britain really that different ?

The wide range of sources collated here indeed reveal a more complex and nuanced history of use than the simple economic utilitarianism and vandalism inferred hitherto by architectural history. Howard, Stevenson and Moss¹⁰ have identified cultural and political motives for the use of salvage and *spolia* and, whilst the latter relates to 17th century Ireland, it is argued here that the same motives applied in the rest of 17th century Britain. Fancelli¹¹ sees an aesthetic imperative for the use of salvaged materials in Britain during the 17th and 18th centuries that associates it with the Gothic(k) movement of the 18th century. Detailed archaeological analyses by, for instance, Stocker and Everson¹², Rakoczy¹³ or Lazanski¹⁴ have also identified hints of an established and structured pattern of supply and use within Medieval and Post-medieval Britain comparable in scale to that identified for continental Europe and the

¹ Alchermes, 1994

² Brenck, 1987

³ Greenhalgh, 2009

⁴ Ousterhout, 1995 and 2003

⁵ Bernard *et al* 2008

⁶ Moss, 2008

⁷ Colvin 1959, 1963, 1982 and 2001; Pevsner, *passim*; Salzmann, 1952; Airs, 1979 and 1995

⁸ Howard, 2007, p26

⁹ Stevenson, 2006

¹⁰ *op cit*

¹¹ Fancelli, 2008

¹² Stocker and Everson, 1990

¹³ Rakoczy, 2007 and 2008

¹⁴ Lazanski, 2013.

Mediterranean by Bernard *et al*¹⁵, Greenhalgh¹⁶ and Waters¹⁷; whilst the analyses of Brigham¹⁸, Thompson¹⁹ and Dennison²⁰ have highlighted the widespread use of salvaged materials and their potential for informing the analysis of lost buildings and, possibly, technology transfer. Similarly, cultural and even economic studies, though not necessarily focussing on buildings or building materials, reveal circumstantial evidence of the cultural context in which materials such as church fabric were used for non-utilitarian societal purposes and hint at a hitherto hidden substrate of cultural activity for which salvaged building materials might have formed a medium of economic and customary 'linear' exchange, and the only archaeological and historical evidence of it. The use of salvaged building materials in Britain during the Medieval, Post-medieval and Early Modern periods was, therefore, widespread and culturally complex.

A new understanding ? : insights and limitations

If the case studies are representative of, at least post-medieval buildings or building practice, they suggests that the use of salvaged materials has been more widespread than the spectrum of Anglo-centric historical sources and published architectural analyses would lead us to believe. This was probably true across the full range and hierarchy of building types and certainly throughout the Medieval, Post-Medieval and early Modern period.

Detailed archaeological analyses of those buildings complement and augment that developing understanding of the historical use of salvaged building materials and architectural details in Britain. At the domestic level the case studies demonstrate that the use of salvaged materials could occasion departure from vernacular norms, as roofs and building layouts were adjusted to accommodate salvaged assemblies – a trend not identified across the Channel or in Ireland or, for that matter, in the Mediterranean. Meanwhile, larger buildings, secular and ecclesiastical, demonstrate the monumental scale at which salvage was employed and hint at customary patterns of 'linear' exchange not evident in historical sources; whilst Whitestaunton

¹⁵ Op cit

¹⁶ Op cit

¹⁷ Waters, 2015

¹⁸ Brigham, 1992

¹⁹ Thompson, 2013

²⁰ Dennison, in prep

Manor, Netherhams Farm and Bradenstoke Priory reveal a sophisticated use of salvaged material for aesthetic and, possibly, polemical effect. Whilst some aspects of the usage postulated here – such as a customary ‘linear’ exchange of materials - cannot be proved on the basis of the small sample of buildings studied, examples such as Cockington Court and Christchurch Priory surely warrant further research into the more subtle architectural manifestations of social, economic and religious hierarchies in post-medieval Britain.

Obviously, building design and construction has always been influenced, concurrently, by a range of factors and without doubt, in most cases, salvage performed a simple economic function as a convenient and relatively inexpensive building material. But, as Carvais²¹ observes for France, salvage wasn't always cheaper, and the pulpitum and roof structure at Christchurch demonstrates that it wasn't always local or convenient. More importantly, in instances such as Netherham Farm, salvaged material has been employed deliberately for its 'iconic' or symbolic value in exactly the same manner as late Roman, Renaissance and 17th century Irish practice, by culturally specific owners and possibly as a component of a more extensive, designed aesthetic landscape. Similarly, the use of salvaged materials from a martial opponent's seat as a customary totemic alternative to the destruction of it, postulated by Rakoczy²², nicely evokes the military and etymological origins of *spolia* in the Roman world. In its ultimate expression, the use of salvaged materials and structural assemblies has formed the structural core and decorative detail of aesthetically coherent and historically convincing proto-Gothic(k) architectural creations such as Bradenstoke Priory.

Types of salvage

Whilst it is likely that most instances of salvage were motivated by several factors concurrently, for the purposes of this study it is useful to attempt a classification of the types of salvage. The only British analysis of salvaged materials to date, by Stocker and Everson²³, proposed a tri-partite classification of uses based on their study of early medieval churches in East Anglia: 'casual', 'functional' and 'iconic'. Comparative analysis, here, of the wider range of building types and published sources suggests a slight revision of that classification is warranted. Their ‘utilitarian’

²¹ *ibid*

²² Rakoczy, 2007 and 2008

²³ Stocker and Everson, *op cit*

and 'functional' categories fall within a 'customary' use; their 'iconic' category stands, but embraces the wider polemical purposes of the secular world; to which is added here the 'aesthetic'. No single instance would have fallen wholly within any one category of use: the following categories are epistemological, not prescriptively functional or mutually exclusive.

Customary use

At the vernacular level, without doubt, most re-use was 'casual' and 'functional' and was economically driven. Second-hand materials were undoubtedly cheaper and more readily available in many instances, and their use is merely indicative of relative temporal or geographic wealth. However, it is also possible that such materials are not solely tokens of wealth, but that they were the wealth itself. Critical examination of Hoskins' hypothesis of the 'Great Rebuilding'²⁴ illustrates this.

Hoskins postulated a major 'rebuilding' of rural England in the generation after the Dissolution on the proceeds of the distribution of land that accompanied it, which led to the creation of the 'Yeoman house' - i.e. the first permanent dwellings of the wealthier peasantry. He and, ironically his critics, attribute the appearance of these houses directly to the redistribution of land wealth at the Dissolution, despite - as Howard avers - the vast majority of the monastic real estate being transferred to the aristocracy and gentry²⁵. Indeed, there is little historical evidence of commoners, other than merchants such as the Mallocks at Cockington Court, benefiting directly at all²⁶. As with the forced sales of royal and royalist lands a century later, the 'lots' were too big for the common peasantry and soldiery to afford or use. The building materials, however, were of immediate use to 16th century peasants and 17th century soldiers and it is likely that salvage was the medium - the currency - through which the value of monastic and royal estates was transferred to the commonality. Rather than simply being 'evidence' of wealth redistribution, the material fabric of the Yeoman house was the wealth itself, or at least the currency through which value was transferred. The 16th century yeomanry or 17th century soldiery didn't need to own land in order to build on it, but they did need materials.

²⁴ Hoskins, 1952. His theory is recurrently challenged, but Wild and Moir's recent dendrochronology (2013) supports its basic chronological premise.

²⁵ Howard, 1987, p138.

²⁶ Gentiles, 1973, p614.

The supply of such materials was also commercial. The case studies and the work of Rakoczy²⁷, demonstrate the existence of well-established supply chains and markets long before and after the hiatuses of the Dissolution and the Civil War, which relied on networks of specialist contractors, suppliers, markets and the normalisation of quasi-criminal activity not hitherto identified by economic²⁸ or social histories. Bernard *et al*²⁹ have demonstrated the widespread and prolonged currency of that practice throughout France, and Suggett³⁰ and others have demonstrated its contemporaneous currency in Britain. Other evidence, below, suggests that mechanism of transfer was also customary.

That practice, as Lazanski demonstrates³¹, permeated all tiers of society, from the wealthier yeomanry who built their late 16th century houses in villages like Shalbourne with salvaged materials; to the rural aristocracy who embedded whole structural elements of monasteries into their houses; and to parish churches in which liturgically obsolete elements such as pulpitums and decorated roof structures were installed. Admittedly, neither the case studies nor the literature prove the existence of customary exchange of salvaged materials, but both provide sufficient circumstantial evidence to make it a strong possibility. The large quantities of earlier decorative fabric missing from the concrete masses of the last iterations of the monasteries and major churches suggests that the trade was operating throughout the Middle Ages, pre– and post-Conquest, affecting a far wider range of buildings than the relatively few that survive and for which there are historical sources. If that were not the case, archaeological excavations of monastic and cathedral churches would be awash with stylistically redundant decorated stone. They are not. Similarly, the absence and attrition of smaller medieval houses identified by Currie³² and Sugget³³ might be explained, in part, by their customary dismantling for exchange and re-use.

The commercial trade operated in tandem with, possibly superseding, a customary 'linear' exchange of materials, objects and – in the case of Christchurch Priory and Cockington Court – entire structural elements, that was, it is averred here, a social

²⁷ Rakoczy, 2007 and 2008

²⁸ Cf Hobsbawm, 1954

²⁹ Bernard, *et al*, *op cit*.

³⁰ Suggett, 2013

³¹ Lazanski, 2013

³² Currie, 1988

³³ Sugget, 2013

relic of archaeologically attested prehistoric, Romano-British and Early Christian custom. Just like the religious and royal processions of the Middle Ages and the more theatrical Stuart processions that replaced them³⁴, that custom required the public demonstration of obligations and relationships through the exchange of totemic materials and objects. In the case of the monasteries, those obligations and relationships had been expressed architecturally in the layout and decorative fabric of the buildings³⁵. The dismantling of them – at the Dissolution and cyclically many times before – was surely merely another manifestation of those customs and, as Howard³⁶ termed them, 'interchanges'. *Contra* Masinton, the monasteries were dismembered, not necessarily only because of vehement anti-Catholic or anti-monastic sentiment, but also because it was customary to do so. That was evidently the case at Hailes Abbey and in the relationship between Christchurch Priory and Winchester Cathedral as recently as the 17th and possibly the 18th century.

The material beneficiaries in most instances were the social or economic inferiors of the donors, such as Christchurch Priory was to Winchester Cathedral; but in the 'world turned upside down'³⁷ of the late 17th century, the newly landed merchant class, such as the Mallocks of Cockington Court or the Eltons of Whitestatunton, found themselves the embarrassed recipients of their dispossessed predecessors' *noblesse oblige*. Those obligations were discharged publicly through the highly visual translocation of whole structural assemblies – such as floors, roofs of pulpitums – and in the re-use of recognisable components in highly visible positions such as stable yards or outside parish churches.

In some instances, the use of salvaged materials enforced or occasioned structural innovation. No. 56 Market Place and No. 28 Shalbourne are, admittedly, insignificant in the architectural and structural history of England, and there is no evidence that their roofs or staircases were emulated, but the form of both was determined by their incorporation of salvaged materials and substantial building assemblies, not by vernacular tradition. Similarly, the form of the main staircase at Whitestaunton Manor - the architectural centrepiece of the house - was determined primarily by the re-use of its predecessor, not by received fashion.

³⁴ cf Stevenson, 2006

³⁵ Luxford, 2014

³⁶ Howard, 2007, p126.

³⁷ the title of a polemical leaflet of 1647, used by historians such as Christopher Hill to characterise the turmoils of the late 17th century.

That material availability informed the appearance and form of all types of buildings is well-established³⁸, and that availability relates to salvaged as well as 'new' materials. The sudden emergence of Hoskins' Yeoman House undoubtedly owed much to the availability of salvaged materials: might not its form and higher standard of fit-out also have been a direct result of the abundance of such materials and emulation of the buildings from which they were sourced? Howard has demonstrated the influence monastic layouts had on the architecture of larger 16th and 17th century houses of the gentry and aristocracy³⁹ and Lazanski has demonstrated the wide social distribution of monastic *spolia*⁴⁰: is it not possible that the commonality benefited similarly, albeit at a smaller scale? The better-surviving examples of late medieval monastic architecture, such as Cleeve Abbey in Somerset, demonstrate that late 16th century secular developments, such as well-appointed and ceiled ground floor rooms, were actually a monastic innovation. As Lazanski has demonstrated, the despoilers of those buildings would have witnessed at first hand, probably for the first time, enviable levels of comfort and, more importantly, the structural and technical details necessary for its realisation, which they carried away.

Comparison with Renaissance practice and the embargo on salvage in contemporaneous traditional Japanese construction, in which there has been virtually no stylistic or technological development for centuries, suggests, perhaps, that salvage was also an important medium or catalyst of stylistic and technological development in Britain, just as it was in the rest of Europe. The castles of the Civil War, Renaissance palaces such as Nonesuch and the monasteries were the architectural tip of a social, economic and technological pyramid through which aesthetic mores and construction technology trickled. But how? The mechanisms of stylistic and technological transfer, socially and geographically in Britain, have not been explained⁴¹: How did the gentry or yeomanry copy architectural details fixed to 40' or even 20' high buildings?; how was the stereotomy of the ribbed vault transferred from monastic nave to rural porch without the use of foreign language treatises on Descriptive Geometry?; how was the 'secret notched lap joint' made commonplace?.

³⁸ Cf. Clifton-Taylor, 1987

³⁹ Howard, 1987 and 2007.

⁴⁰ Lazanski, 2013, p64

⁴¹ The huge subject of construction technology transfer is not addressed by any English language authorities and we do not know of an English equivalent of Villard de Honnencourt.

Perhaps the unlettered English, unlike their continental and Japanese counterparts, relied on direct copying of second hand materials, architectural hand-me-downs passed down the social and economic hierarchy and across the country, supplying and stimulating a demand that surpassed the simple economics of utility. Bringham has demonstrated that carpentry technology was transferred, or at least carried, from donor building to host structure during the Middle Ages. Are the two coffered ceilings at Whitestaunton model and copy: the first, salvaged from Forde Abbey and installed over the dais window, the second, a copy of it incorporated in the Jacobean west wing ? . Was the floor structure at Cockington Court also acquired for the novelty of the carpentry technology incorporated in it ? It clearly came from a large building in which innovative – or at least experimental - carpenters had been employed – that stood for less than a century. As with the recycled architectural detailing of monastic masonry, is it possible that salvaged timber structures such as this were the conduit through which carpentry technology was transmitted and developed ?

This assertion is supported by dendrochronology. Wild and Moir's holistic analysis of 177 accurately dated houses in Surrey⁴², which broadly supports Hoskins' hypothesis about the transfer of monastic wealth after the Dissolution, remarks on the speed with which structural and technological innovations were adopted in the mid to late 16th century. The insertion of upper floors over formerly open halls, the more economic use of timber as narrow modulus beams and joists, and developments in joint form occurred "*within a generation*". This they attribute, *pace* Hoskins, to the rapid vertical distribution of monastic real estate wealth. Could such changes occur within a generation ? In our own times we have witnessed a similar privatisation of public wealth⁴³, with little popular manifestation of it, despite infinitely higher levels of financial liquidity and accessible credit compared to the 16th century. Back in the 16th and 17th centuries, the financial institutions and mechanisms necessary for the transfer and realisation of land wealth to the 'Yeomanry' within a generation did not exist⁴⁴. A generation after the Dissolution, most of the monastic estates were securely in the hands of the Crown and the major aristocracy⁴⁵ and many remained so until the late 19th century when agricultural depression enforced cash sales.

⁴² Wild and Moir, 2013

⁴³ i.e. the utilities companies in the late 1980s

⁴⁴ Gentiles, 1973

⁴⁵ Howard, 1987, p138.

But, as Rakoczy and Lazanski have demonstrated, salvage was commonplace and emulation via it feasible. The structural and technological innovations identified in Surrey were, it is averred here, the result of direct emulation of more sophisticated forms and details removed from the monasteries⁴⁶ and other large buildings. The roof timbers of No. 56 Market Place, the stairs of No. 28 Shalbourne and possibly the floor structure of Cockington Court are, it is suggested here, examples of that.

Iconic use

With the singular exception of Netherhams Farm, the casual and functional use of salvaged materials appears to have been restricted to domestic buildings. This suggests that its recipients attributed to it extra-utilitarian qualities. In other words: if the builders attributed no special qualities to salvaged materials such as timber and stone, such materials would occur equally in all types of buildings. Londoners of the 17th century evidently attributed extra-utilitarian qualities to the masonry of 12th century Jews' houses⁴⁷; the custodians and pilgrims of the Holy Sepulchre⁴⁸ clearly did; and it is reasonable to suggest that disenfranchised parishioners of pre-Reformation churches⁴⁹ and 17th century Royalists were acting out of similar motives in their hiding of church fabric and pieces of the Boscobel Oak⁵⁰. The material fabric of the monasteries and Royalist estates therefore had polemical and economic agency.

What is indisputable, is that the case studies demonstrate that a specific group of owners⁵¹, primarily in the late 17th and early 18th centuries, employed salvaged architectural details for deliberate visual effect. Those effects were political and aesthetic, the latter also alluding to the circulation of Renaissance architectural writing and ideas outside major cities and the Court in the second half of the 17th century. In the case of the southwest, it was broadly contemporary with the earliest Renaissance-influenced houses such as Brympton D'Evercy and Ashton Court. Those owners were Catholic or, in the case of Whitestaunton Manor, possibly christianised Jews, both groups that lived under suspicion, if not outright censure, in late 17th and early 18th century Britain. The deliberate incorporation of salvaged

⁴⁶ cf. Lazanski, 2013, pp36-62

⁴⁷ Stevenson, 2006

⁴⁸ Ousterhout, 2003

⁴⁹ Duffy, *op cit*

⁵⁰ Harris, Harris and James, *op cit*

⁵¹ The term is used here in its modern sense and to refer to tenants-in-chief such as Germanicus Sheppard at Bradenstoke

details for visual effect at Netherhams Farm, Whitestaunton and Bradenstoke Priory is directly comparable with 17th century Protestant practice in Catholic Ireland and, indeed, late Imperial practise under the Christianised Roman Empire. These are Post-medieval British examples of *spolia*. There is also a whiff of incense hanging about the floor structure at Cockington, but that is less certain. These are, surely, manifestations of two complementary phenomena: the influence of European architectural writing outside London and court circles in the 17th century; and the use of salvaged materials and details - *spolia* - for socio-political effect.

For, if Gent can aver that editions of Vitruvius first circulated in England via the agency of William Cecil, Lord Burghley who, as the Duke of Somerset's secretary "*must have at least known of Daniele Barbaro*"⁵² - one of the 16th century publishers of Vitruvius – then it is surely reasonable to suggest here that Lord Stawell, who was employing a French architect to impress his Catholic wife, was also influenced by European writing. He might not have been able to risk or afford building an overtly southern European house in the politically charged atmosphere of late 17th century rural England, but his use of *spolia* from his father-in-law's house was the next best way of demonstrating his learning and tastes to the knowing, and his respect for his wife's family and custom to everyone else.

Whitestaunton Manor is, arguably, more significant because the Elton family appear to have been merchants, like the Mallocks at Cockington Court, and cultured apostate Jews living well beyond their urban comfort zone⁵³. Like Stawell, their use of salvaged architectural details proclaimed their familiarity with European writing and practice to those who understood it, whilst enhancing the antiquity of a manorial building they were eagerly modifying, to those who did not. Together with their re-use of the stairs, it demonstrated to the recently feudal members of their audience that they were conservative landlords and custodians of the manorial seat, in the same way that Protestant Anglo-Irish landlords were doing in Ireland. Their architectural embellishments expressed continuity at a time of great change.

Aesthetic use

Stawell, the Eltons, Danvers or the Methuens set their salvaged concoctions within designed aesthetic landscapes. Stawell's included a miniature church, a 'paradise'

⁵² Gent, 2014

⁵³ Hobsbawm, 1962, p239.

landscaped stream and an ornamental dovecote positioned for maximum skyline visibility; the Eltons' also included a 'paradise' landscaped stream and, possibly, the remains of a Roman bath house – although there is no evidence that they were aware of it; whilst the re-sculpted Bradenstoke Priory stood within the landscaped civil war defences created and commanded by Danvers. All display characteristics of *I giardini inglesi* when understood as a components of designed aesthetic landscapes and, possibly, the Gothic(k), but Danvers' motives appear the more quixotic.

His remodelling and embellishment of the rump of the medieval priory and his own defensive earthworks, created a wholly original and whimsical architectural entity capped by a tower that proclaimed his familiarity with Mediterranean models and writing, while his vaulted cellar anticipated the fantastical creations of Piranesi and the Gothic(k) movement by nearly a century. Much of this was wholly new work, but much also relied on his use of salvaged structures, materials and details, particularly in the barrel vault. This is salvage – indeed, *spolia* – on a grand scale worthy of its Renaissance models. The Methuens, possibly Germanicus Sheppard, definitely Gabriel Goldney and eventually Hearst and Allom, developed Danvers' work, manipulating the remains of Bradenstoke Priory like an architectural toy. Danvers, enduring the architectural purdah of the Commonwealth he had helped deliver, used the skyline of Bradenstoke Priory to proclaim his aesthetic – if not political – sympathy with the deposed monarchy by creating an Italianate folly visible from the Great West Road that linked London with Bristol. The Gothicising of Bradenstoke Priory was the unashamed conversion of the ruins into a folly as part of a *giardino inglese* - possibly the *giardino inglese* if Aubrey was correct. That does not make the surviving remains any less important. Augustinian priories are relatively abundant in England, even if only as archaeological remains, but late 17th century garden follies incorporating Mediterranean towers are not⁵⁴; whilst the narrative thread linking an aristocratic Civil War regicide, the Methuens of Corsham Court and England's foremost monastic archaeologist of the early 20th century with Citizen Kane would make a fascinating study of provincial architectural patronage in its own right. The image of an aristocratic Roundhead castellan converting his ravelins into a

⁵⁴ Headley and Meulenkamp's (1999) inventory of follies for Wiltshire lists only seven old enough to have been drawn by the Buck Brothers, all but one of which are either grottoes, later 18th century relocations or houses with symbolic plan-forms (Longford Castle). Only the Pepperbox folly at Whiteparish of 1606 is of comparable date and form to the Mediterranean tower of Bradenstoke Priory.

landscape gardens and his quarters into an Italianate folly during the Civil War adds a picaresque dimension to Bradenstoke's otherwise wholly tragic saga⁵⁵.

Those three trends – the customary, the iconic and the aesthetic uses of salvaged building materials and architectural details - represent the British use of salvaged materials and *spolia*, a *Spolia Britannica*. They demonstrate that in at least this one respect, Britain - or at least some of it - was not substantively different from its continental and Catholic neighbours.

Sample validity

The applicability of the case studies to the whole of Britain is necessary only for the conceit of the thesis title, which might otherwise have been sub-titled: "*A comparative study of the historical use of salvaged materials in seven buildings in southwest England*." Nonetheless, the comparative literature has been drawn from around the whole of the archipelago and demonstrates the use of salvaged materials throughout Britain during the last two millennia and the different circumstances under which that use occurred. There is relatively little written specifically about the British use of salvaged materials and, apart from Moss⁵⁶, Stevenson⁵⁷, Howard⁵⁸ and, perhaps, Stocker and Everson⁵⁹, none of the architectural or archaeological analyses of historic buildings imply anything other than utilitarian or economic motives. This study, therefore, has been lead by the author's analysis of the case study buildings in the light of that reading.

Those case studies provide detailed primary examples of that use during the post-medieval centuries for a selection of building types. They are not statistically representative of the whole of Britain or even of the southwest of England – that would require a more extensive survey - but they are an arbitrary sample taken from a professional caseload dictated by others. In each case, the incidence of salvaged materials was recorded unconsciously several years before commencement of this study. Only with hindsight and further investigation of their patronage histories, was a pattern perceived.

⁵⁵ Cf Brown, 1999, 'Military Gardens'.

⁵⁶ Moss, *op cit*

⁵⁷ Stevenson, *op cit*

⁵⁸ Howard, 1987, p 26

⁵⁹ Stocker and Everson, *op cit*

The case study buildings are not exceptional. For the sake of brevity, the study has been restricted to seven buildings, with duplication of building type allowed only for the manor houses because Whitestaunton Manor and Cockington Court illustrate very different uses of salvaged materials and building elements. Many others could have been included: Countless Georgian houses in Bath have roofs and partitions constructed entirely of salvaged timber⁶⁰; Shute Barton and domestic buildings of all classes in Devon incorporate salvaged materials in chronologically and functionally significant patterns⁶¹; faux-Tudor garden buildings within landscaped 'paradise' stream valleys at Cricket St Thomas incorporate second-hand beams to enhance their antiquarian verisimilitude; Dyrham House, near Bath, utilises salvaged timber in only one of the roofs built between 1689 and 1702 – that over the Old Hall⁶²; whilst the former precincts of Cerne Abbas and Abbotsbury in Dorset and Edington Priory in Wiltshire are embellished with fanciful antiquarian concoctions of salvaged monastic masonry.

Furthermore, neither the building types nor the circumstances of their owners and occupiers are specific to southwest England. With the exception of the outermost 'wastes' of the Celtic fringe, most regions of Britain contain small houses, farm buildings, manor houses or seats of the minor aristocracy, churches and former monasteries; whilst political upheaval and religious non-conformity, Catholic or otherwise, have never been the preserve of the southwest. Yes, there have always been variations in construction practice and architectural design, just as there have been variations in the manifestation of Catholicism⁶³, but such variations could invalidate any sample of something as multivariate as historic buildings.

The case studies are deficient in medieval buildings, or at least medieval building practices: Whilst Cockington Court, Whitestaunton Manor, Christchurch Priory and Bradenstoke Priory were founded in the Middle Ages, the interventions identified here were undoubtedly post-Reformation. Thorpe and Cox's surveys of Devon buildings⁶⁴ suggest that salvaged materials were not incorporated in the primary fabric of medieval domestic buildings, but the author has not inspected those

⁶⁰ The author has surveyed and recorded a large number of 'Georgian' buildings in central Bath.

⁶¹ Thorpe and Cox, *passim*; Hussey, 1951, shows that the western porch of Shute Barton (c.AD1561) incorporates short lengths of salvaged cornice in its arch imposts.

⁶² the author has just completed a survey of the roofs of Dyrham House for the National Trust

⁶³ Haigh, 1981

⁶⁴ Appendix 1

buildings himself. On the other hand, Suggett's analysis of archival sources relating to domestic Welsh buildings identifies widespread use of salvaged materials and details; as do historical sources for Windsor, Manor of the More (Herts) etc.; whilst archaeological analysis of medieval churches⁶⁵ in East Anglia and medieval ancillary structures in London⁶⁶ demonstrate the widespread use of salvaged materials in non-domestic structures at least. The author suspects that analysis of primary sources relating to medieval building construction and occupancy would reveal widespread and structured use of salvaged materials, just as Carvais and others have done for France⁶⁷.

Industrial buildings are also not represented. The author has not identified the use of salvaged materials in purpose-built industrial buildings, an observation confirmed by Thorpe and Cox's Devon surveys⁶⁸. This undoubtedly reflects the rationalist and commercial background to most such buildings. Nonetheless, a review of building types and periods in which salvage was not employed would make for heavy reading.

For the purposes of this study, it is sufficient to be able to demonstrate that the purposeful use of salvaged materials occurred from the mid 16th century onwards in a range of building types in southwest England; that for some types of building that use was associated with religious or political non-conformity; and that those buildings and occupiers are of types that occur throughout Britain.

Interdisciplinary insights

Architectural historians do not, generally, examine buildings during their dismantling, refurbishment or demolition. That is left to buildings archaeologists. The evidence base relied on here would not, normally, be available to an architectural historian. However, a small number have utilised the services of archaeologists to provide finer chronological resolution, notably Howard, Snodin and Drury⁶⁹, whilst Drury began his professional life as an archaeologist, but they are exceptional. So, if the evidence and conclusions drawn from it appear to contradict received architectural history, that tension arises from the different evidence bases of the two disciplines.

⁶⁵ Stocker and Everson, *op cit*

⁶⁶ Brigham, *op cit*

⁶⁷ Carvais, *op cit*

⁶⁸ Appendix 1

⁶⁹ Howard and Wilson, 2003; Snodin, 2009; Drury, 1980 and 2009.

Nonetheless, from the archaeological perspective, the case study buildings and material are 'inauthentic' and would be treated as such by buildings archaeologists⁷⁰. The floor timbers of Cockington, like those of Bowhill or Hill Hall⁷¹, were not felled for their host buildings so they can tell the archaeologist little about it, hence they were disregarded by the dendrochronologist; the roof timbers in Warminster and the stair enclosure in Shalbourne would be treated the same. As far as the archaeologist is concerned, the *spolia* of Whitestaunton Manor is simply relic detail, while the ill-fitting pulpitum of Christchurch Priory or the re-configuration of Bradenstoke Priory are simply incomprehensible and are ignored as inconsequential whimsy. The material is, at best, 'residual', at worst, fake, in the art historical sense: it might be able to elucidate the source buildings, as with the medieval revetment timbers of London, or it might be able to tell us nothing.

However, if such material is recognised as accomplished artistic expression in its own right, or as the vector of political, stylistic and technological diffusion, it assumes a greater significance and becomes the valid subject of study and conservation. Though perhaps difficult to identify and categorise, its analysis is arguably just as important as the typological classification of its host buildings. It suggests that salvage has long been widespread in England at all levels of society; that it was customary; that it performed an important role in the transfer of style and construction technology; that it was employed symbolically by politically vulnerable groups; and that it stimulated and facilitated the creation of architecturally accomplished and historically significant structures. Those traits, it is contended here, are directly comparable to the use of *spolia* in the Classical and Renaissance Mediterranean and as such constitute *Spolia Britannica*.

⁷⁰ Greenhalgh (2009, p 16) makes the same observation about 'excavating' archaeologists and their treatment of *spolia*.

⁷¹ Cf. Blaylock, 2004; Bridges, 1999, specifically disregards re-used timbers.

BIBLIOGRAPHY

Published

- Ackroyd, P., 1994, *The Life of Thomas More*. (Random House)
- Adams, C., 1998, 'Japan's Ise Shrine and Its Thirteen-Hundred-Year-Old Reconstruction Tradition', *Journal of Architectural Education*, **Vol 52**, No.1, pp49-60.
- Airs, M., 1979, 'The English Country House in the Sixteenth Century,' *Oxford Art Journal* **Vol 2, Art and Society**, pp15-18
- Airs, M., 1995, *The Tudor and Jacobean Great House: A building history* (Alan Sutton, Stroud)
- Alchermes, J., 1994, 'Spolia in Roman cities of the late Empire: Legislative rationales and architectural re-use', *Dumbarton Oaks* Vol **48** pp167-178
- Allen, J.R.L., Rose, E.J., Fulford, M.G., 2003, 'Re-use of Roman stone in the Reedham area of East Anglia: Intimations of a possible 'Lost' Roman fort', *Britannia* **34** pp129-114
- Anon, 1881, 'Bradenstoke Priory,' *Wiltshire Archaeological and Natural History Magazine*, **19**, pp 145-7
- Anon, 1902, 'Bradenstoke Priory', *Wiltshire Notes and Queries*, **March**. (Wilts Archaeol and Nat History Soc., Devizes)
- Anon, 1925, 'Bradenstoke Priory,' *Wiltshire Archaeological and Natural History Magazine*, **43**, p 1
- Anon, 1930, 'Bradenstoke Priory,' *Wiltshire Archaeological and Natural History Magazine*, **45**, pp 80-1, 473
- Anon, 1937, 'Bradenstoke Priory,' *Wiltshire Archaeological and Natural History Magazine*, **47**, p 286
- Anon, 1969, 'Bradenstoke Priory,' *Wiltshire Archaeological and Natural History Magazine*, **64**, p 135
- Arnhem, R., 1994, 'The Way of the Crafts', *Design Issues*, **Vol 10** No.1 pp29-35
- Aston, M., 1978, 'Gardens and Earthworks at Hardington and Low Ham', *PSANHS* **122**
- Ayers, J., 1998, *Building the Georgian City*. (Yales/Paul Mellon)
- Bann, S., 2009, 'Historicizing Horace', in Michael Snodin (Ed), *Horace Walpole's Strawberry Hill*. (Yale)
- Beaglehole, E., 1931, *Property: A study in Social Psychology*. (Unwin)
- Bedoyere, G., de la, 1995, *The writings of John Evelyn*. (Boydell)
- Beech, R., 2014, 'Form v Function: the structural development of early fifteenth century hammer-beam roofs', in J.W.P.Campbell et al (Eds), *Proceedings of the First Conference of the Construction History Society, Queens' College Cambridge, 11-12th April 2014*. (Construction History Society)

Belk, R.W., 1984, 'Cultural and historical differences in concepts of self and their effects on attitudes towards having and giving', in T.C.Kinnear (Ed) *Advances in Consumer Research*, Volume 11, pp754-763

Bernard, J-F., Bernardi, P., and Esposito, D., (Eds) 2008, *Il Reimpiego in Architettura: Recupero, Trasformazione, Uso. Collection de L'ecole Francaise de Rome 418* (Ecole Francaise de Rome, Universita 'La Sapienza' Roma)

Blaylock, S., 2004, *Bowhill: The archaeological study of a building under repair in Exeter, Devon, 1977-95.* (English Heritage)

Bond, J., and Iles, R., 1991, 'Early Gardens in Avon and Somerset', in A.E. Brown (Ed), *Garden Archaeology*, (CBA Res Rep **78**)

Bradley, R., 2001, 'Contrary Motion', in Robert J.Wallis and Kenneth Lymer (Eds), *A Permeability of Boundaries: New approaches to the Archaeology of Art, Religion and Folklore*, **BAR International Series 936.**

Brakspeare, Sir H., FSA, 1925, 'Excavations at some Wiltshire Monasteries', *Archaeologia* 73

Brander, G. 1786, 'Account of a singular discovery of a quantity of bird bones buried in Christ Church priory, Hampshire', *Archaeologia* Vol 4 pp 117-118

Brenck, B., 1987, 'Spolia from Constantine to Charlemagne: Aesthetics versus Ideology', *Dumbarton Oaks* Vol 41 pp103-109

Brewer, J., and Staves, S., 1996, *Early Modern Conceptions of Property.* (Routledge, New York)

Brewer, J., 2013, *Pleasures of the Imagination: English Culture in the Eighteenth Century* (Paul Mellon/YUP)

Bridges, M.C., 1999, 'Tree Ring Analysis of Timbers from Hill Hall, Theydon Mount, Essex.' **Ancient Monuments Laboratory Report No. 55/1999.** (Historic Buildings and Monuments Commission).

Briggs, M.S., 1952, *Goths and Vandals: A study of the destruction, neglect and preservation of historical buildings in England.* (Constable)

Brigham, T., 1992, 'Reused house timbers from the Billingsgate site, 1982-3', in Milne, G., 1992, *Timber building techniques in London c.900-1400.* **London and Middx Archaeol Soc. Special Paper No.15.**

Britton, J., 1847, *Aubrey's Natural History of Wiltshire.* (London)

Brown, J., 1999, *The Pursuit of Paradise: A Social History of Gardening and Gardeners.* (Harper Collins)

Brunskill, R.W., 1985, *Timber Building in Britain.* (Gollancz)

Cairncoss, A.K., and Weber, B., 1956 'Fluctuations in Building in Great Britain', *The Economic History Review*, New Series, **Vol 9**, pp 283-297

Campbell, J.W.P., and Tutton, M., (eds) 2014, *Staircases: History, Repair and Conservation.* (Routledge)

Carvais, R., *et al*, 2012, 'On Construction History', in R.Carvais, A.Guillermé, V.Negre and J.Sakarovitch (Eds), *Nuts and Bolts of Construction History Vol 1. Proceedings of the 4th International Congress on Construction History, Paris, July 2012.* (Edition Picard, Paris)

Chandler, J., (Ed), 1993, *John Leland's Itinerary.* (Sutton)

Cherry, B., 2013, 'London's Public Events and Ceremonies: an Overview Through Three Centuries,' *Architectural History*, **56**, pp1-28

Cherry, B., and Pevsner, N., 1989, *The Buildings of England: Devon.* (Penguin)

Clifton-Taylor, A., 1987, *The Pattern of English Building.* (Faber and Faber)

Cluzel, J-S., 2012, 'Hokusai Manga as a Reference Construction Book', in R.Carvais *et al* (Eds), *Nuts and Bolts of Construction History Vol 1. Proceedings of the 4th International Congress on Construction History, Paris, July 2012.* (Edition Picard, Paris)

Cockain, E., and Tullet, K., 2003, *The Saxon church of the Holy Trinity Thuinam.* (Natula Publications, Christchurch)

Cocke, T.H., 1975, 'James Essex, Cathedral Restorer', *Architectural History*, **Vol 18**, pp12-22, 97-102.

Colclough, D., 2010, 'The Materials for the Building: Reuniting Francis Bacon's *Sylva Sylvarum* and *New Atlantis*, *Intellectual History Review*, **20**, 181-200

Collins, A., and Brydges, Sir E., 1812, *Collins's Peerage of England Volume 9*, p425. (Collins, London)

Collinson, Revd J., 1791, *The history and antiquities of the County of Somerset.* (Private. Facsimiles held by most large Somerset libraries)

Colvin, H.W., 1959, 'Four 14th –Century Building Contracts', *Architectural History* Vol 2 pp19-25

Colvin, H.W., *et al*, 1963, *History of the Kings Works, Volume II The Middle Ages.* (HMSO)

Colvin, H.W., *et al* 1982, *History of the Kings' Works, Volume IV 1485-1660.* (HMSO)

Colvin, H.W., 2001, 'Lord Stawell's Great House in Somerset', *Architectural History*, **Vol 44. Essays in Architectural History Presented to John Newman**, pp332-340.

Courtney, P., 1984, 'Excavation of the Outer Precinct of Tintern Abbey,' *Medieval Archaeology*, **Vol 33**, pp 99-143

Cowan, R., (Ed) 2013, 'Briefing: Kelmarsh Recycled', *Context*, **No 128**, p2. (Cathedral Communications)

Cragoe, C.D., 2005, 'Belief and Patronage in the English Parish before 1300: Some evidence from Roods,' *Architectural History*, **Vol 48**, pp21-48

Creighton, O., 2000, 'Early castles in the medieval landscape of Wiltshire', *Wiltshire Archaeological and Natural History Magazine* **93**, pp

Cross, F.L., and Livingstone, E.A., 1997, *The Oxford Dictionary of the Christian Church.* (OUP)

- Currie, C.R.J., 1988, 'Time and Chance: Modelling the Attrition of Old Houses', *Vernacular Architecture*, **19**, pp1-9.
- Currie, C.R.J., 1990, 'Time and Chance: A Reply to Comments', *Vernacular Architecture*, **21**, p5
- Daniell, J.J., 1879, *The History of Warminster*. (Coates & Parker, Warminster)
- Davies, S.M., Bellamy, P.S., Heaton, M.J., and Woodward, P.J., 2002, *Excavations at Alington Avenue, Dorchester, Dorset, 1984 – 87*, **Dorset Natural History and Archaeological Society Monograph No. 15**. (Dorchester)
- Dennison, E., 'Sheriff Hutton Castle, Northumberland' in Wright, Richardson and Rakoczy, in prep.
- Dittmer, H., 1992, *Social Psychology of Material Possessions: to have is to be*. (Harvester Wheatsheaf, Hemel Hempstead)
- Dockrill, S., and Bond, J., forthcoming, *The Multi-Period Settlement of old Scatness, Shetland*, **Society of Antiquaries of Scotland Monograph Series**. (Edinburgh)
- Dogget, N., 1997, 'Patterns of Re-use: The transformation of former monastic buildings in Post-Dissolution Hertfordshire 1540-1600'. (PhD Thesis, University of Southampton).
- Druitt, H., 1921, *Christchurch: A Brief Account of the Church, extracted from the Christchurch Miscellany*. (Private, Christchurch)
- Druitt, H., 1919-1932, *Christchurch Miscellany*, pp 374-378. (Private, Christchurch)
- Drury, P., 1980, 'No other place in the kingdom will compare with it: the evolution of Audley End 1605-1745,' *Architectural History*, **23**, pp 1-39
- Duffy, E., 1992, *The Stripping of the Altars*. (Yale)
- Duffy, E., 2001, *The Voices of Morebath* (Yale)
- Easton, T., 1997-8, 'Scribed and painted symbols' in P. Oliver, *Vernacular Architecture of the World*. (CUP)
- Easton, T., 1999, 'Ritual marks on historic timber', *Weald and Downland Open Air Museum Magazine* **Spring 1999** pp22-30
- English Heritage, 1978. 'List of Buildings of Special Architectural or Historical Interest: West Wiltshire'. (on-line version accessed July 2015).
- Fancelli, P., 2008, 'De spoliis in fictas ruinas', in Bernard, J-F., Bernardi, P., and Esposito, D., (Eds) 2008, *Il Reimpiego in Architettura: Recupero, Trasformazione, Uso*. **Collection de L'ecole Francaise de Rome 418**, pp661-674 (Ecole Francaise de Rome, Universita 'La Sapienza' Roma)
- Fanon, F., 1963, *The Wretched of the Earth*. (English Translation; Grove Press)
- Flood, F. B., 2006, 'Image against Nature: Spolia as Apotropaia in Byzantium and the dar-el-Islam', *The Medieval History Journal* **Vol 9**, pp143-166
- Foot, N.D.J., Litton, C.D., and Simpson, W.G., 1986, 'The high roofs of the east end of Lincoln Cathedral', *Medieval Art and Architecture at Lincoln*. Reproduced in Lynn T. Courtney (Ed), 1997, *The Engineering of Medieval Cathedrals*, **Studies in the History of Civil Engineering, Vol 1** . (Ashgate)

- Frampton, K., Kudo, K., and Vincent, K., 1997, *Japanese Building Practice: From ancient times to the Meiji period* (Van Nostrand Reinhold)
- Garner, T., and Stratton, A., 1929, *The Domestic Architecture of England During the Tudor Period* (Batsford)
- Gent, L., 2014, 'Elizabethan Architecture: a View from Rhetoric', *Architectural History*, **57**, pp 73-108
- Gil, M., 1971, 'Maintenance, Building Operations and Repairs in the houses of the Qodesh in Fustat: A Geniza Study', *Journal of the Social and Economic History of the Orient* Vol 14 No 2 pp136-195
- Greenhalgh, M., 2009, *Marble Past, Monumental Present: Building with Antiquities in the Medieval Mediterranean*. (Leiden, Brill)
- Gregory, C.A., *Gifts and Commodities*. (New York: Academic Press)
- Grenville, J., 1997, *Medieval Housing*. (Leicester University Press)
- Grenville, J., 2001, 'Out of the shunting yard; One academic's approach to recording small buildings', in S.Pearson and R.Meeson (Eds), *Vernacular Buildings in a Changing World*, **CBA Research Report No. 126**, pp11-26. (Council for British Archaeology)
- Goodburn, D., 1992, 'Woods and Woodland: Carpenters and Carpentry', in Gustav Milne, *Timber Building Techniques in London c.900-1400* (LaMAS)
- Gough, R., 1979, 'James Wyatt and Late 18th Century Preservation,' *Journal of the Society of Architectural Historians*, **Vol 38, No.4**, pp366-374
- Gould, S., 2004, 'Analysing and recording historic buildings', *Context* No.84 (Institute of Historic Building Conservation)
- Guillery, P., and Snodin, M., 1995, 'Strawberry Hill: Building and Site', *Architectural History* **38**, pp 102-128
- Habbakkuk, H.J., 1958, 'The market for monastic property, 1539-1603', *The Economic History Review*, New Series, , Vol 10, No.3, pp362-380
- Habakkuk, H.J., 1962, 'Public Finance and the Sale of Confiscated Property during the Interregnum', *The Economic History Review*, New Series, , Vol 15, No.1, pp70-88
- Haigh, C., 1981, 'The Continuity of Catholicism in the English Reformation,' *Past and Present*, **No. 93**, pp37-69
- Hanna, K. A., 2007, *The Christchurch Cartulary*, **Hampshire Record Series Vol. XVIII**. (Hants County Council)
- Hall, L., 1983, *The Rural Houses of North Avon and South Gloucestershire 1400-1720*, **Monograph No 6**. (Bristol Museum and Art Gallery)
- Harris, E., Harris, J., and James, N.D.G., 2003, *Oak: a British history*. (Windgather Press)
- Harris, J., 2007, *Moving Rooms: The trade in architectural salvage*. (Paul Mellon Centre for Studies in British Art)

Hawkes, J.W., and Heaton, M.J., 1993, *Jennings Yard, Windsor: Excavation of a closed-shaft garderobe and associated medieval structures*. **Wessex Archaeology Monograph No 3** (Wessex Archaeology, Salisbury)

Headley, G., and Meulenkamp, W., 1999, *Follies, Grottoes and Garden Buildings*. (Aurum Press)

Hearn, M.F., 1975, 'Romsey Abbey: A Progenitor of the English National Traditional in Architecture', *Gesta*, **Vol 14 No.1**, pp27-40

Heaton, M.J. and Davenport, P., 2003, 'A late medieval timber frame at Nos 21-22 High Street, Bath', *Proceedings of the Somerset Archaeological and Natural History Society* **146** pp 73-79

Heaton, M.J., 2007, 'The roof of the Abbey Barn, Abbotsbury', *Proceedings of the Dorset natural History and Archaeological Society* **128** pp120-123

Heaton, M.J., 2009, 'Building palaeopathology: Practical applications of archaeological building analysis', *Structural Survey* Vol **27** No. 2. (Emerald)

Hernu-Belaud, J., 2012, 'The *Architecture Pratique* by Pierre Bullet (1691) and the Normalisation of the Construction Process', *Nuts and Bolts of Construction History* Vol 1, pp 489-494, **Proceedings of the 4th International Congress on Construction History, Paris, July 2012**. (Editions Picard)

Hewett, C., 1980, *English Historic Carpentry*. (Phillimore)

Hewett, C., 1982, *Church Carpentry*. (Phillimore)

Heyman, J., 1995, *The Stone Skeleton: Structural Engineering of Masonry Architecture* (CUP)

Hobbs, S., 2003, 'Clack Mount.', *Wiltshire Studies*, **Vol. 96**, pp 101

Hobsbawm, E., 1962, *The Age of Revolution 1789-1848*. (Weidenfield and Nicholson)

Hoskins, W.G, 1952, 'The Rebuilding of Rural England, 1570-1640', *Past and Present* **No. 4** pp 44-59

Howard, M., 1987, *The Early Tudor Country House: Architecture and Politics 1490-1550*. (George Philip)

Howard, M., 2003, in D.Gaimster and R. Gilchrist (Eds), 'Recycling Monastic Fabric: Beyond the Act of Dissolution,' *The Archaeology of Reformation 1480-1580*. **Archaeology of Reformation Conference February 2001**. (Maney, Leeds)

Howard, M., and Wilson, E., 2003, *The Vyne: A Tudor House Revealed*. (National Trust)

Howard, M., 2007, *The building of Elizabethan and Jacobean England*. (Paul Mellon, YUP)

Hunter, J.R., 2007, *Investigations in Sanday, Orkney: Excavations at Pool, Sanday – A multi-period settlement site from Neolithic to Late Norse times. Vol 1*. **Society of Antiquaries of Scotland Monograph Series**.

Hussey, C., 1951, 'Shute Barton, Devon,' *Country Life*, **109**, pp 326-330 and 398-401.

Inskip, P., 1992, 'Discoveries, Challenges and Moral Dilemmas in the Restoration of the Garden Building at Stowe', *Huntingdon Library Quarterly*, Vol 55, No. 3 **An English Arcadia: Landscape and Architecture in Britain and America** pp511-526

- Jackson, J.E. (Ed), 1862, *Wiltshire: The Topographical Collections of John Aubrey, AD1659-70* (Devizes)
- Jacob, W.M., 2011, 'Sacred space in the long eighteenth century: seating in churches,' *Ecclesiology Today*, **44**, p 3-16
- Jenkins, J.C., 2010, 'Torre Abbey: locality, community and society in medieval Devon', **DPhil Thesis, University of Oxford.**
- Jenner, M., 1995, 'The Politics of London Air: John Evelyn's Fumifugium and the Restoration', *The Historical Journal* **Vol 38 No3** pp535-551
- Johnson, M.H., 1986, 'Assumptions and Interpretations in the study of the Great Re-building', *Archaeological Review from Cambridge*, **5**, pp141-153
- Johnson, M.H., 1992, 'Meanings of Polite Architecture in Sixteenth-Century England', *Historical Archaeology*, **26, 3**, pp 45-56.
- Johnson, M.H., 1993, 'Re-thinking the Great Re-building', *Oxford Journal of Archaeology*, **12**, pp117-125
- Johnson, M.H., 2010, *English Houses 1300-1800: Vernacular Architecture, Social Lives.* (London, Pearson)
- Keene, D., 1969, 'Japanese Aesthetics', *Philosophy East and West*, **Vol 19**, No. 3 pp 293-306
- Keevil, G., Aston, M., and Hall, T., (Eds), 2001, *Monastic Archaeology.* (Oxbow)
- Kelsey, S., 2004, 'Sir John Danvers (1588-1655)', *Dictionary of National Biography* (Oxford)
- Klein, U., 2014, 'The Past, Present and Future of Building Archaeology – *Bauforschung* – in Germany', in C.Bolle, G.Coura and J-M. Leotard (Eds), 2014, *L'Archaeologie des Batiments en Question. Un Outil pour les Connaitre, Les Conserver et Les Restaurer. Etudes et Documents, Archaeologie, 35: Actes due Colloque International, Liege, les 9 et 10 Novembre 2010*, pp259-272. (Institut du Patrimoine Wallon, Namur, Belgique)
- Knowles, D., and Hadcock, R.N., 1971, *Medieval Religious Houses in England and Wales* (Longman)
- Kruft, A.W., 1994, *A history of architectural theory.* (Zwemmer)
- Lang, J., 1971, *Old Cockington* (Private. West Country Studies Library, Exeter)
- Lazanski, D, 2013, 'The Destruction of Hailes Abbey: a case study in pillaging at the dissolution.' **MPhil Dissertation, University of Bath.**
- Lee, S., 1900, *Dictionary of National Bibliography, 1885-1900*, Volume **14**. (accessed through <http://wikisource.org> on 28.10.14)
- Lindley, P., Brodrick, A., and Darrah, J., 1989, 'The Great Screen of Winchester Cathedral I', *The Burlington Magazine*, **Vol 131, No. 1038** (Sep. 1989), pp604-617
- Lloyd, V., Dean, J., and Westwood, J., 2001, 'Burn marks as evidence of apotropaic practices in houses, farm buildings and churches in Post-Medieval East Anglia, in Robert J. Wallis and Kenneth Lymer 2001.
- Luxford, J., 2014, 'Architecture and Environment: St Benet's Holm and the fashioning of the English Monastic Gatehouse,' *Architectural History*, **57**, pp 31-72.

- MacFarlane, A., 1970, *Witchcraft in Tudor and Stuart England: A Regional and Comparative Study* (Routledge)
- Machin, R., 1977, 'The Great Re-building: A re-assessment', *Past and Present*, **No 77 (1)**, pp33-56.
- Malinowski, B., 1922, *Argonauts of the Western Pacific: An Account of Native Enterprises and Adventure in the Archipelagoes of Melanesian New Guinea*. (Routledge and Kegan)
- Mallock, R., 1895, *Cockington House before the Restoration* (Private. West Country Studies Library, Exeter)
- Masinton, A., 2008, 'The Destruction of the Monasteries: Dissolution and Continuity of Space in Tudor Yorkshire', in L. Rakoczy (Ed), *The Archaeology of Destruction*. (Cambridge Scholar Publishing), pp 239-260.
- Mercer, E., 1990, 'Time and Chance: A Timely Reminder', *Vernacular Architecture*, **21**, p1
- Merryfield, R., 1969, 'Folklore in London Archaeology', *The London Archaeologist*, **Vol 2, No 5**, pp9898-104
- Merryfield, R., 1987, *The archaeology of ritual and magic*. (Batsford)
- Meeson, R., 2005, 'Ritual Marks and Graffiti: Curiosities or Meaningful Symbols', *Vernacular Architecture*, **36**, 41-48.
- Middleton, R., 2013, 'The first history of construction?. A Memoire by Jean Rondelet', *Construction History* **Vol 28 No. 3**, pp 47-68
- Miyake, R., and Maejima, M., 2012, 'A Study of Military Facility Planning from the Viewpoint of Technology Transfer from France to Japan,' *Nuts and Bolts of Construction History Vol. 1. Proceedings of the 4th International Conference on Construction History, Paris, July 2012*. (Editions Picard, Paris)
- Moss, R., 2008, 'Appropriating the Past: Romanesque spolia in 17th century Ireland', *Architectural History*, **51**, pp 63-86
- Mowl, T., and Earnshaw, B., 1995, *The Rise of Puritan Classicism under Cromwell*. (Manchester).
- Munby, J., and Fletcher, J., 1983, 'Carpentry in the Cathedral and Close at Winchester,' *Medieval Art and Architecture at Winchester Cathedral. British Archaeological Association Conference Transactions Vol. VI for the year 1980* (Leeds)
- Musson, J., 2011, 2011, *English Ruins*. (Merrell)
- Ochsendorf, J.A., 2006, 'Engineering Analysis for Construction History: Opportunities and Perils', *Proceedings of the 3rd International Congress on Construction History, Cambridge* **Vol 1**, pp89-107.
- Ousterhout, R., 1995, 'Ethnic Identity and Cultural Appropriation in Early Ottoman Architecture, *Muqarnas* **Vol 12**, pp48-62
- Ousterhout, R., 2003, 'Architecture as Relic and the Construction of Sanctity: The Stones of the Holy Sepulchre', *Journal of the Society of Architectural Historians*, **Vol 62**, pp4-23
- Payne, A., 1998, 'Creativity and bricolage in architectural literature of the Renaissance', *Res* **34** pp 20-38

- Pearson, S., and Meeson, R., (Eds), 2001, *Vernacular Buildings in a Changing World*. **CBA Research Report 126**. (Council for British Archaeology)
- Penoyre, J., 1998, 'Medieval roofs in Somerset', *Vernacular Architecture* **29** pp 22-32
- Penoyre, J., 1998, *Decorative Plasterwork in Somerset.....*(Somerset County Council)
- Penoyre, J., 2005, *Traditional houses of Somerset*. (Somerset County Council)
- Pevsner, N., and Cherry, B., 1975, *The Buildings of England: Wiltshire*. (Yale)
- Polk, B., 1994, *Christchurch Priory*. (Academy Editions)
- Potter, J.F., 2001, 'The occurrence of Roman brick and tile in churches of the London Basin,' *Britannia* **32** pp119-142
- Preston, A.E., 1935, 'The Demolition of Reading Abbey', *The Berkshire Archaeological Journal*, **Vol 39 No. 2**, pp 107-144
- Prown, J.D., 1982, 'Mind in Matter: An introduction to material culture theory', *Winterthur Portfolio*. **Vol 17**, No. 1, pp1-19
- Pryor, F., 1991. *Flag Fen: Prehistoric Fen Land Centre*. (English Heritage)
- Puget, J., 'Construction Market Organisation in the 17th Century: Norms, Actors and Practices – Examples of Extension Plans in Aix and Marseilles', *Nuts and Bolts of Construction History Vol. 1*, pp 495-502. **Proceedings of the 4th International Congress on Construction History, Paris, July 2012**. (Editions Picard)
- Pugh, R.B., (Ed), 1956, *Victoria County History of Wiltshire*, Vol 3, p 275
- Radley, A., 1990, 'Artefacts, memory and a sense of the past', in D. Middleton and D. Edwards (Eds), *Collective Remembering: Memory in Society*, pp46-59.
- Rakoczy, L., 2007, *Archaeology of Destruction. A Reinterpretation of Castle Slightings in the English Civil War*. **PhD Thesis. University of York**
- Rakoczy, L., 2008, 'Out of the ashes: Destruction, Re-Use and Profiteering in the English Civil War', in L. Rakoczy (Ed), *The Archaeology of Destruction*. (Cambridge Scholar Publishing)
- Ramage, N. H., 2002, 'Restorer and Collector: Notes on Eighteenth Century Recreations of Roman Statues', *The Ancient Art of Emulation: Studies in Artistic Originality and Tradition from the Present to Classical Antiquity*, **Memoirs of the American Academy in Rome, Supplementary Volumes, Vol 1**, pp61-77.
- RCHME, 1952, *Historical Monuments in the County of Dorset*, Vol 1. (Royal Commission on the Historical Monuments of England), pp74-85
- Renfrew, C., 1969, 'Trade and Cultural Process in European Prehistory', *Current Anthropology*, **Vol 10 No 2/3**, pp151-169
- Roberts, E., 2003, *Hampshire Houses 1250 – 1700: Their Dating and Development*. (Hants County Council)
- Roberts, E., 2011, 'Early Roofs in Hampshire:1240-1600,' in J. Walker (Ed), *The English Medieval Roof: Crownpost to Kingpost*. **Report of the Essex Historic Buildings Group Day School 2008**. (Essex Historic Buildings Group)

- Salzmann, L.F., 1952, *Building in England down to 1540*. (Leicester University Press)
- Saunders, B., 1970. *John Evelyn and his times*. (Pergamon)
- Schofield, J., and Vince, A., 1994, *Medieval Towns*. (Leicester University Press)
- Schweizer, K. W., 2004, 'Methuen, Sir Paul (c.1672-1757)', *Oxford Dictionary of National Biography*. N (Oxford University Press, On-line Edition)
- Shackleton, J., and Elderfield, H., 1990, 'Strontium Isotope dating of the source of Neolithic European Spondylus shell artefacts,' *Antiquity*, **64**, No **243**, pp312-15
- Shagan, E., 2002, 'Selling the Sacred: Reformation and Dissolution at the Abbey of Hailes', in E. Shagan (Ed) *Popular Politics and the English Reformation*. pp 162-196 (CUP)
- Shedd, J., 2000, 'Legalism over Revolution: The Parliamentary Committee for Indemnity and Property Confiscation Disputes, 1647-1655', *The Historical Journal* **Vol 43 No.4**, pp 1093-1107.
- Smith, J.T., 1956, 'Medieval Aisles Halls and their derivatives', *Archaeological Journal* **112**
- Smith, P., 1990, 'Time and Chance: A Reply', *Vernacular Architecture*, **21**, p4
- Snodin, M., and Guillery, P., 1995, 'Strawberry Hill: Building and Site', *Architectural History*, **38**, pp 102-128.
- Stanley-Millson, C., and Newman, J., 1986, 'Blicking Hall: The Building of a Jacobean Mansion', *Architectural History*, Vol 29, pp1-42
- Stevenson, C., 2006, 'Occasional Architecture in Seventeenth Century London', *Architectural History*, Vol 49, pp35-74
- Stocker, D., and Everson, P., 1990, 'Rubbish Recycled: A study of the re-use of building stone in Lincolnshire', in D.Parsons (Ed), *Stone Quarrying and Building in England AD43-1525*. (Phillimore/Royal Archaeological Institute)
- Stocker, D., 1994, 'Introduction: Understanding what we conserve', in J.W. Woods (Ed) 1994, *Buildings Archaeology: Applications in Practice*, pp1-12. **Oxbow Monograph 43**. (Oxbow Books)
- Suggett, R., 2013, 'Peasant Houses and identity in Medieval Wales', *Vernacular Architecture*, **44**, pp13-15.
- Taylor, C., C., 1970, 'Dorset', in *Making of the English Landscape*. (Hodder and Stoughton)
- Thirsk, J., 1952, 'The sale of Royalist lands during the Interregnum', *The Economic History Review*, New Series, Vol 5, No. 2, pp188-207
- Thompson, J., 2013, 'Tindalls Cottage: the repair works', *Weald and Downland Open Air Museum Magazine*, Spring 2013, p3. (Weald and Downland Open Air Museum, Chichester)
- Thrush, A., and Ferris, J.P., 2010, *The History of Parliament: The House of Commons 1604-1629*. (CUP)
- Treib, M., 1976, 'The Japanese Storehouse', *Journal of the Society of Architectural Historians* **Vol 35** No.22 pp 124-137

- Venning, P., 1998, 'Taking on a Tycoon', *SPAB News*, **Vol 19**, No.3, pp 12-15
- Victoria County History, 1978, *Victoria County History of Somerset*, Vol **4**, pp231-238 (Institute for Historical Research, London)
- Walker, J., 2011, 'Introduction and Overview', in J. Walker (Ed), *The English Medieval Roof: Crownpost to Kingpost*, **Report of the Essex Historic Buildings Group Day School 2008**. (Essex Historic Buildings Group)
- Wallis, J., and Lymer, K., (Eds), 2001, *A Permeability of Boundaries: The Archaeology of Art, Religion and Folklore*, **BAR International Series No. 936**. (British Archaeological Reports)
- Waters, M.J., 2015, 'Reviving Antiquity in Granite: Spoliated columns and the development of the Roman Renaissance,' in Lex Bosman (Ed), *Architecture in Pieces: the representation of architecture by means of spolia*. (Tournhout: Brepolis)
- Watkin, H. R., 1920, *The House of Stuart and the Cary Family: James II and Torre Abbey*. (James G. Commin, Exeter)
- Weiner, A.B., 1992, *Inalienable Possessions: the Paradox of Keeping-While-Giving*. (Berkeley: University of California Press)
- Wendelken, C., 1996, 'The Tectonics of Japanese Style: Architect and Carpenter in the Late Meiji Period', *Art Journal* **Vol 55** No. 3: Japan 1868-1945, Art, Architecture and National Identity, pp28-37
- Wild, R., and Moir, A., 2013, 'Key dating features for timber-framed dwellings in Surrey', *Vernacular Architecture*, **44**, pp46-61.
- Wilson, R.G., and Mackley, A.L., 1999, 'How much did the English Country House cost to build, 1660-1880?', *The Economic History Review*, New Series, , Vol 52, No.3, pp436-468
- Wilson-Jones, M., 2003, *Principles of Roman Architecture*. (New Haven. Yale University Press)
- Wood, J., (Ed), 1994, *Buildings Archaeology: Applications in Practice*, **Oxbow Monograph No. 43**. (Oxbow Books)
- Wood, M., 1965, *The Medieval House*. (Studio Editions)
- Woodward, C., 2001, *In Ruins*. (Chatto & Windus)
- Woodward, D., 1985, 'Swords into Ploughshares: Recycling in Pre-Industrial England', *The Economic History Review*, New Series, Vol 38. No. 2 pp175-191.
And
- Woodward, D., 1998, 'Bracken and Wicklow Whale: The exploitation of natural resources in England since 1500', *Past & Present*, No 159 pp43-76
- Woodward, P.J., Davies, S.M., and Graham, A.H., 1993, *Excavations at Greyhound Yard, Dorchester 1981-4*, **Monograph Series No. 12**. (Dorset Natural History and Archaeological Society)
- Wright, T., Richardson, S., and Rakoczy, C., in prep, 'The Naked Carcass: the destruction of Sheriff Hutton Castle c. 1590-1800'
- Yeomans, D., 1992, *The Trussed Roof: its history and development*. (Scolar Press)

Archive and 'grey literature' sources

BHC, 2000, 'Bradenstoke Heritage Collection'. (Devizes Museum)

Bridge, M., 2011, 'Cockington Court, Cockington Lane, Cockington, near Torquay, Devon: Tree-ring analysis of timbers. Scientific dating report.' (English Heritage Research Report Series 120-2011)

Cox, J., and Thorpe, J., 1988-2008. (Citations presented in Appendix 1)

Emmett, M., 1865, 'The Legends of the Priory at Christchurch.' (Privately published pamphlet, copy held in the Topographical Collections of Hampshire Records Office, Ref. TOP70/1/8)

Haywood, W., 1897, 'Account of Pugin travelling scholarship to Somerset and Wiltshire'. RIBA Archive Ref. X(079) P 72.033.4/5

Heaton and Keevil, 2003, 'Abbotbsury Abbey, Dorset: A Conservation Management Plan on behalf of The Ilchester Estates. (English Heritage and Ilchester Estates)

Heaton, M.J., 2010, *Christchurch Priory: Conservation Management Plan*. (Christchurch Priory).

Heaton, M.J., 2012, 'Whitestaunton Manor, Somerset: Observations 2004 – 2011'. (Non-publication planning report deposited with the County Historic Environment Record)

Penoyre, J. & J., 1996, 'Whitestaunton Manor, Whitestaunton, Chard'. (Somerset Vernacular Building Research Group report held by Somerset Records Office, Ref. DD/V/CHR/27/7)

RCHME, 1998, 'Bradenstoke Priory and Clack Mount', (non publication survey report, Royal Commission on the Historical Monuments of England)

RIBA VOS/251 and 252 (Notebooks of John Dando Sedding)

Somerset Vernacular Building Research Group, 1996, 'Whitestaunton Manor'. (non-publication local history research held by Somerset Records Office)

SPAB File: Bradenstoke Priory

SPAB File: Christchurch Priory

Wilson-North, 1997, 'Low Ham, Somerset: Relic gardens of the 17th century and development of the landscape' (non publication survey report, Royal Commission on the Historical Monuments of England)

Appendix 1. Gazetteer of building surveys by Keystone Historic Building Consultants, Devon

Keystone Historic Building Consultants always mention salvaged timbers when seen. They present cogent arguments for dating based on plan form analysis and carpentry where dendrochronology is not available: interestingly they never mention the incidence of salvaged elements/timber as a relative dating tool, even though such material appears to be absent from primary medieval structures. Only surveys with access to structure are cited – lots done in Totnes etc. but these are obscured by 18th and 19th finishes.

Building and report name	Type of survey and report	Type and date of building	Extracted conclusion	Authorship
Kerswell Priory, Broadhembury	Assessment. No drawings	Rural. 17 th -19 th C on medieval priory, poss. incorp med fabric in 17 th C ranges	Roof: 17thC blades in 18 th C roof. Outshots: 17 th C moulded timbers as beam bearers in wall	Cox, J., and Thorpe, J., 199)
Lower Lovaton Farmstead, South Towton	Record.	Rural. Late med (15thC) homestead with major L16th – E17th refurb.	Re-used floor beam in L16th-E17thC refurb of hall house. L16-E17 joists in 18 th C roof over passage on L16th chamfered beam. NB. Late med roof intact with NO salvaged members and decorative timber (door frames etc.) all newly-made at this date. Agric. Outbuildings also lack salvaged elements. .	Cox, J., and Thorpe, J.,1991
Great Pitt Farm, Silverton	Asst	R. Late 15 th C – E16thC homestead with 16 th /17 th and L19th-20thC refurbs	No re-used elements in med fabric.	Thorpe, J., and Cox. J., 2008
20, 22, 24b Fore St. Totnes	Record	U. M16th C town house	No salvaged elements in M16th C fabric. SF floor structure of M17thC extension are of re-used	Cox, J., and Thorpe, J., 1998

			joists (plain J-B housings)	
Warren Barn, Cockington	Record	18 th C barn group	No salvaged elements	Cox, J., and Thorpe, J., 1994
Membury Court, Membury	Record	L14th-E15th hall house and chapel	No salvaged elements in early med hall house or chapel. Re-used wall frame elements in Let med extension 1450-1550. 'Botched' panelling in L16th – E17th refurb (19 th ?) but doesn't infer 19 th /20 replication. .	Cox, J., and Thorpe, J., 1993
Uplowman Court, Uplowman	Record	L 13 th C solar and chapel	No salvaged materials in 13 th fabric. M-L16thC parlour extension incorp. Salvaged window frames	Cox, J., and Thorpe, J., 1988
South Yarde Farm, Rose Ash	Record during refurb. Free access to all of roof. NB. Solid oak treads on rubble "base" of E-M17thC (W/Staunton)	1450 Hall house homestead. Dendro 1447. with fantastic dec arch-braced roof with halved and pegged common rafters	No salvaged elements in primary 1450 fabric. 17 th C refurb implied from decorative insertions such as ceiling and partitions (so appearance essential), but no structural evidence presented.	Cox, J., and Thorpe, J., 1993
The Barn at Whelmstone Barton, Colebrooke	Record	c. 1615 barn.	No salvaged elements in primary fabric	Cox, J., and Thorpe, J., 1996

10a High Street, Totnes	Record during minor refurb	Poss. late med hall house with extensive alterations	No salvaged elements in primary fabric. M16th C 'merchants' house' incorp. Reused headplate of stud panel as 'cross beam'. 18 th C dec refurb incorp salvaged 16 th & 17 th C doors as cupboards	Cox, J., and Thorpe, J., 1998
The 'Old Barn', Manor House, Cheddon Fitzpaine	asst	C1450-1550 hall house converted to barn in L17-18th	No salvaged elements in primary late med fabric	Cox, J., and Thorpe, J., 2002
Barn, Pound Farm, Luppit	Asst	Late 17 th barn	No salvaged elements in primary late 17 th C fabric	Cox, J., and Thorpe, J., 1991
Canal Cottage, Morwellham	Record	Early 19 th lock keepers cottage	No salvaged elements in primary fabric	Cox, J., and Thorpe, J., 1992
Hackhams, Buckerell	asst	Late medieval hall house. 1450-1550. NB block stairs just like W/Staunton.	No salvaged elements in primary fabric. E. 17 th mullions used in L17-18thC cupboard framing.	Cox, J., and Thorpe, J., 1997
Cottage etc. Hill Farm, Landkey	record	Late med (1450-1550) Hall house, extensively altered. Very small humble building	No salvaged elements in primary fabric. 17 th C FF over hall incorp salvaged half-beams	Cox, J., and Thorpe, J., 1992
East Liddaton Brentnor	asst	E15th C hall house, much altered	No salvaged elements in primary fabric	Cox, J., and Thorpe, J., 1991
Langford Court, Cullompton	Fire survey Record	L14-E15th courtyard house, altered and extended	No salvaged elements in primary medieval fabric. Med stud frame and muntin partitions incorp in 17 th C extensions. NB. 17 th mullion windows "are copies" relocated in 19 th /20 walls.	Cox, J., and Thorpe, J., 1995

Lower Southwood, Rockbeare	Fire survey record	17 th C house substantially re-built in 18 th C with complete brickwork new front wall	"E18th C alterations incorp a great deal of re-used timber, most of it from the E17th C house"	Cox, J., and Thorpe, J., 1992
Broomham, Kings Nympton	record	Late med hall house (c.1500), much altered in 16 th and E 17 th C	No salvaged elements in primary fabric. Re-used door in 1638 refurb, that's all (so no Civil war spoils)	Cox, J., and Thorpe, J., 1995
Whitehall Manor, Hemyock	Fire survey record	Single phase early-mid 17 th C hall house	No salvaged elements in primary fabric. (pre-dates Civil War but not present at Dissolution)	Cox, J., and Thorpe, J., 1997
70 High St, Totnes	record	M 17 th C merchant's house "just before or after the Civil War"	Attic partitions all re-used. External stud frame walls of 19 th C incorp much 16 th and 17 th timbers; 17 th roof frames incorp re-used principals.	Cox, J., and Thorpe, J., 1997